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WONDER Stories

October

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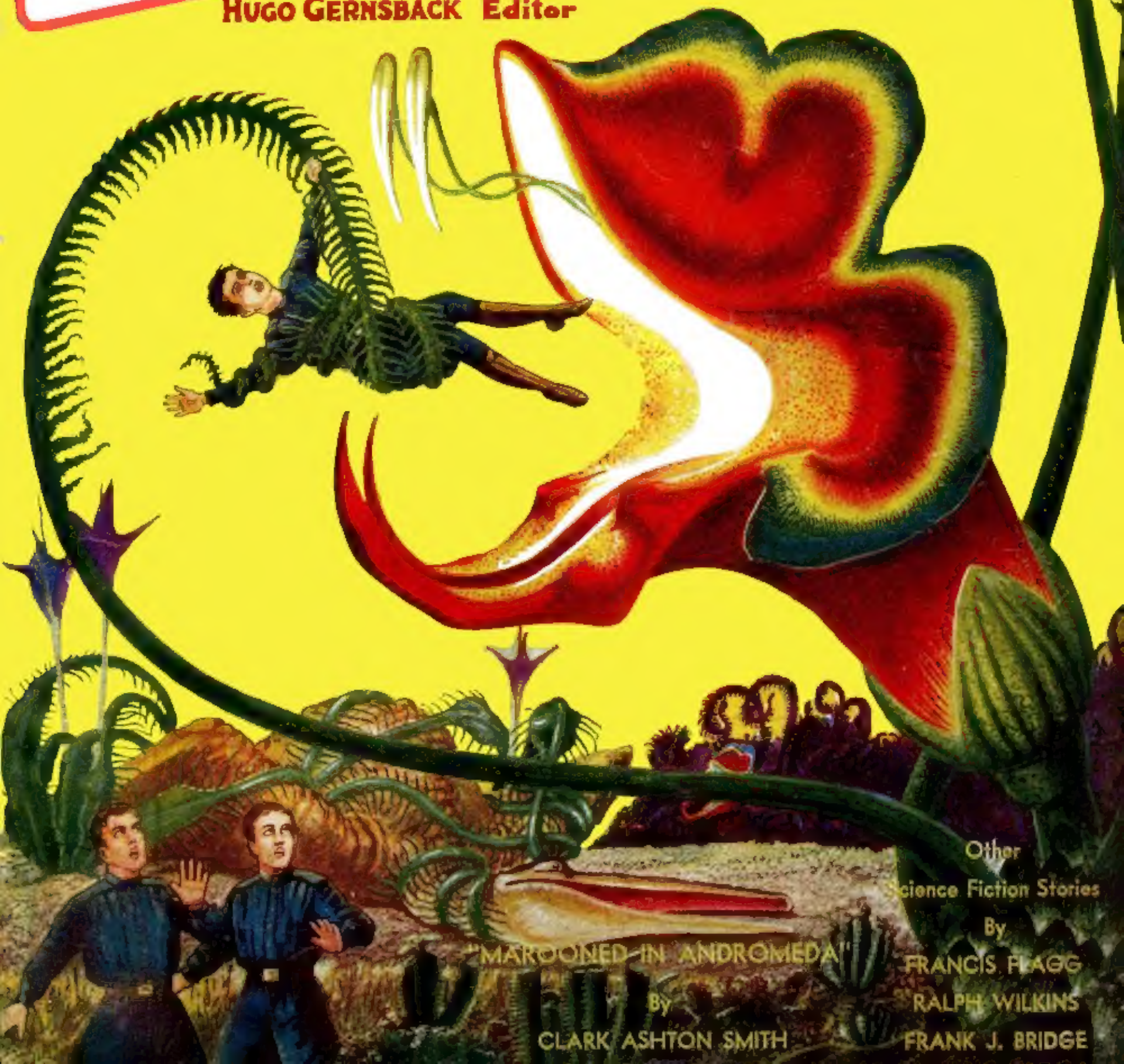
HUGO GERNSBACK Editor



"MAROONED IN ANDROMEDA"
By
CLARK ASHTON SMITH

Other
Science Fiction Stories
By
FRANCIS FLAGG
RALPH WILKINS
FRANK J. BRIDGE

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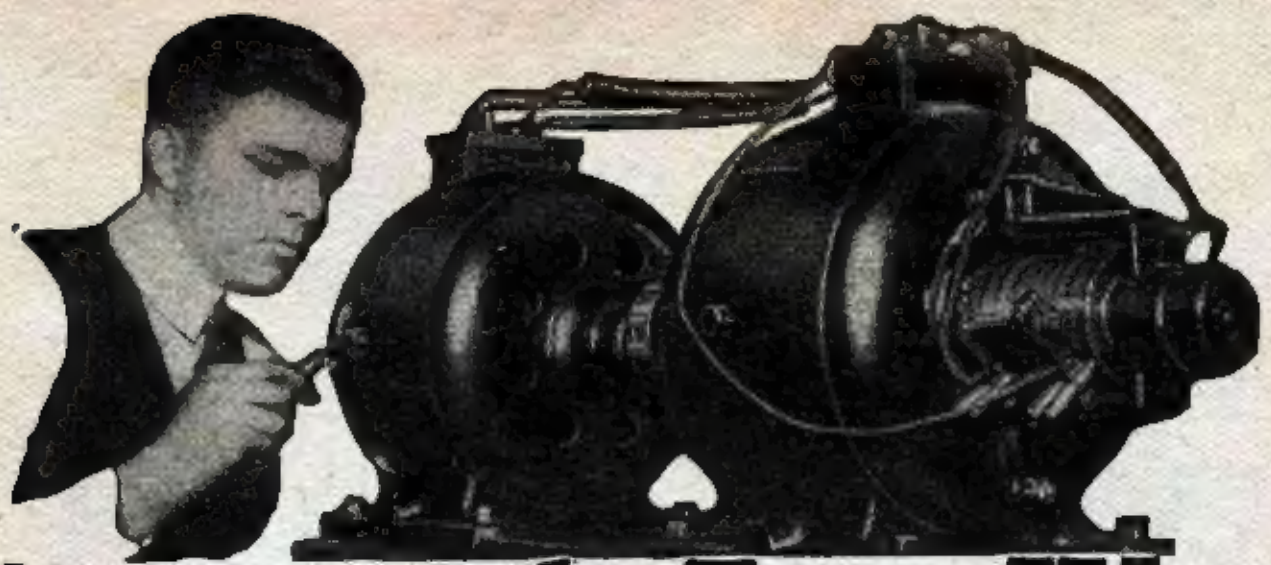

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NEXT MONTH

THE TIME ANNIHILATOR, by Edgar A. Manley and Walter Thode. We have had many adventures in space, chases across thousands of miles and many continents to do great deeds and solve great secrets. But we have never had a chase through time. For this reason alone, the present story might serve as one of the most unusual we have had the pleasure of presenting to our readers. But aside from the main idea, the scenes in this marvelous time travelling story are stupendous—civilizations toppling . . . rising to fall again . . . new races arising and disappearing, and through it all we have the breathtaking adventures of three young men!

THE INVULNERABLE SCOURGE, by John Scott Campbell. Our gifted young author of the "Infinite Brain" offers us now this exciting story of a new world menace. As he says in his introduction, "the only thing that keeps the insect kingdom in check is the balance of Nature, which is always maintained. In the preservation of this balance lies the existence of all life on the Planet." But suppose by the hand of man, and a strange accident this balance were destroyed and an invulnerable scourge appeared in the land—WHAT WOULD HAPPEN? Our author tells us in his own vivid and convincing manner.

HORNETS OF THE VOID, by R. F. Starzl. The flood of letters that greeted "The King of the Black Bowl" showed that our readers are wildly enthusiastic about Mr. Starzl's realistic pictures of mysterious events. He has followed up his success by this new triumph. He has shown us that if we are to conquer interplanetary space that we must safeguard the lanes of traffic against all marauders. And if the forces of law and order and the vandals both possess strange scientific instruments, exciting adventures are due to be the order of the day.

THE WAR LORD OF VENUS, by Frank J. Bridge. With this issue, we regretfully conclude this unusual series of adventures of scientists on a world fifty million years behind our own in civilization! Surely no more phenomenal thing has ever been recorded than eminent scientists leading half savage tribes into warfare against each other. And when they meet . . . allow our author to tell it in his own way.

AND OTHERS.

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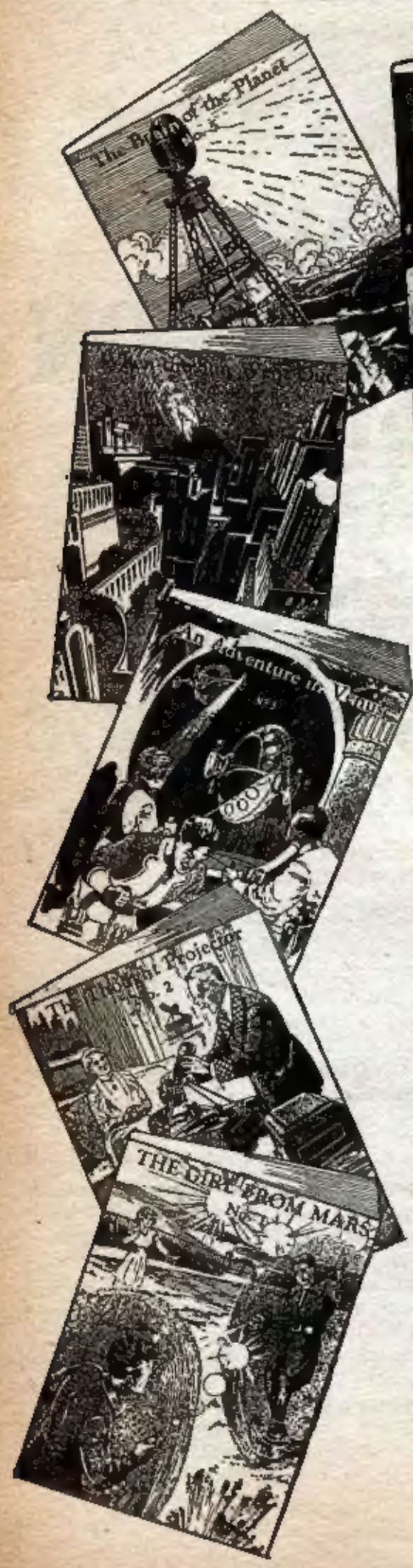

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No. 5

WONDER Stories

OCTOBER
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Announcement

IN conformity with our policy of improving our magazine wherever possible for the benefit of our readers, beginning with the next (November) issue, WONDER STORIES will be published in a more convenient size (7 by 10 inches) instead of the more or less bulky 9 by 12-inch size used at present.

¶ The contents of the magazine furthermore will be increased to 144 or 160 pages, which compares with the present 96 pages.

¶ This action was taken after an extensive survey conducted among a large number of readers to discover which size they preferred. We found that 87½ per cent. voted for the more convenient size. The reasons for the preference were chiefly that the new size is handier and the magazine can be carried more easily, read in a crowd, and slipped into a coat pocket.

¶ Furthermore, a scientific test which we conducted showed that the 7 by 10-inch size causes the least strain on the eyes. This alone, we think, entitles our readers to the new size.

¶ WONDER STORIES, in the new size, will also offer a number of important improvements in typography, art work and far greater readability.

¶ Incidentally it will be possible to offer more stories in the new size than in the old without any increase in the price.

¶ If you are a newsstand reader be sure to look for the November WONDER STORIES among the small-size magazines on the newsstand. Remember it is 7 by 10 inches instead of 9 by 12 inches.

THE PUBLISHERS.

Marooned in Andromeda

By Clark Ashton Smith

—(*Illustration by Paul*)

There was no time for terror—no chance to resist. The men tottered and slipped simultaneously into space.

"I'M going to put you fellows off on the first world of the first planetary system we come to."

The icy deliberation of Captain Volmar's tones was more terrible than any show of anger would have been. His eyes were chill and sharp as the sapphire lights in snow; and there was a fanatic rigor in the tightening of his lips after the curtly spoken words.

The three mutineers looked sullenly at each other and at the captain, but said nothing. The levelled automatics of Volmar and the three other members of the space-flier's crew, made all appeal or argument seem absurd. They knew that there could be no relenting on the part of that thin, austere mariner of the interstellar gulfs, who had dreamt of circumnavigating space and thus becoming the Magellan of the constellations.

CLARK ASHTON SMITH

THE average author of interplanetary stories assumes that conditions on a far distant planet are similar to what they are on earth.

The chances are one in a billion that this is so. It is absolutely certain that if a space flyer were to land on a foreign world, conditions would be found so utterly different that they cannot even be pictured by our most imaginative science fiction writers. It is quite certain that whatever is found on a distant world will be in strict accordance with the peculiar conditions on that world. Even on earth we find that everything is adapted to its environment. In the deep sea we find fish that make their own light because there is no light in those far depths. These fish have eyes extended beyond their bodies. We have on our earth animals that are half plants, such as the common sponge, and others that are half animals and half stone, such as coral. The list is interesting, and if we can find most surprising combinations on earth, we may be sure that still more amazing ones will be found on other worlds.

The present story is an excellent example of this and the author deserves a special commendation due to his daring and far reaching vision in depicting conditions as they might exist on a distant planet in another universe.

Incidentally, it is one of those hair-raising, action stories that you simply cannot lay aside until you finish.

For five years he had driven the great vessel further and further away from the earth and the solar system, which had long ago dwindled into points of telescopic light —for five years he had hurled it onward at more than the speed of cosmic rays, through the shoreless, bottomless night, among the shifting stars and nebulae. The configuration of the skies had changed beyond all recognition; the Signs were no longer those that are known to terrestrial astronomers; far-off stars had leapt into blazing suns and had faded back to stars; and there had been many a flying glimpse of stranger planets. And year by year the cold terror of the endless deeps, the vertiginous horror of untold infinitude, had crept like a slow paralysis upon the souls of the three men; and a nostalgia for the distant earth had swept them with unutterable sickness; till they could bear it no longer, and had made their hasty, ill-planned attempt to secure control of the vessel and turn it homeward.

There had been a brief, desperate struggle. Forewarned by a subtle instinct, Volmar had suspected them and had been in readiness; and he and the men loyal to him had armed themselves furtively in preparation, while the others had made their attack bare-handed, man to man. All of the mutineers were wounded, though not seriously, before they could be subdued; and blood dripped from their wounds on the floor of the flier, as they stood before Volmar.

Albert Adams, Chester Deming and James Roverton were the names of the mutineers. Adams and Deming were quite young, and Roverton was now verging upon early middle-age. Their very presence in Volmar's crew was proof of intellectual ability and prime physical fitness, for all had been subjected to examinations of the most rigorous and prolonged order. A high knowledge of mathematics, chemistry, physics, astronomy and other branches of science had been required, as well as a mastery of mechanics; and perfect sight, hearing, equilibrium and a flawless constitution were likewise requisite. Also, it goes without saying that they belonged to a most active, adventurous type: for no ordinary men would even have volunteered for such a project as Volmar's. Innumerable voyages had already been made to the moon and the nearer planets; but, previous to this, aside from the one trip made to Alpha Centauri by the Allen Farquhar expedition, no one had dared the outer deep and the constellations.

Volmar and the three who had remained faithful to him were all of the same breed: men of religious, well-nigh inhuman devotion to an idea, scientists to whom nothing mattered apart from science, who were capable of martyrizing themselves and others if by so doing they could prove a theory or make a discovery. And in Volmar himself there was a spirit of mad adventure, a desire to tread where no man had been before; the cold flame of an imperial lust for unexplored immensitude. The mutineers were more human; and the years of bleak confinement in the space-flier, among the terrific pits of infinity, remote from all that is life to normal beings, had broken down their morale in the end. Few, per-

haps, could have endured it as long as they.

"Another thing," the chill voice of Volmar went on: "I shall put you off without weapons, provisions or oxygen-tanks. You will have to shift for yourselves—and of course, the chances are that the atmosphere, if there is any, will prove unfit for human respiration. Jasper will now proceed to truss you up, so that there won't be any more foolishness."

Alton Jasper, a well-known astronomer, who was first mate of the flier, stepped forward and bound the hands of the mutineers behind them with rope. Then they were locked in a lower apartment of the vessel, above the man-hole that gave entrance and egress. This apartment was insulated from all the rest; and the man-hole could be opened from the higher rooms by means of an electrical device. There the mutineers lay in absolute darkness, except when someone entered with a meager allotment of food and drink.

Aeons seemed to pass, and the three men abandoned all effort to keep a reckoning of time. They spoke little, for there was nothing to speak of but failure and despair and the dreadful unknown fate ahead of them. Sometimes one of them, particularly Roverton, would gallantly try to crack a jest; but the laughter that answered the jest was the last flare of a courage tried almost beyond human endurance.

One day, they heard the voice of Volmar addressing them through the speaking-tube. It was far-off and high and thin, like a voice from some sidereal altitude.

"We are now approaching Delta Andromedae*," the voice announced. "It has a planetary system, for two worlds have already been sighted. We shall make a landing, and put you off on the nearest one, in about two hours."

The mutineers felt a sense of comparative relief. Anything, even sudden death from the inhalation of some irrespirable atmosphere, would be better than the long confinement. Stoically, like condemned criminals, they prepared themselves for the fatal plunge into the unknown.

The black minutes ebbed away, and then the electric lights were turned on. The door opened, and Jasper came in. He removed the bonds of the three men in silence; then he retired, and the door was locked upon them for the last time.

They were aware, somehow, that the flier had slackened its speed. They tried to stand up, with their stiffened limbs, and found it hard to maintain their equilibrium, for they had long been habituated to a rate of movement far beyond that of any cosmic body. Then they were aware that the vessel had stopped: there was a sudden jolt that flung them against the wall, and a cessation of the engines' eternal drone. The silence was very strange, for the throbbing of the great electromagnetic motors had long been as familiar to them as the beating of their own blood.

The man-hole opened with a harsh, metallic screech, and there was a faint glimmering of bluish-green light from without. Then there came a gust of acrid air, and a waft of indescribable smells that were unlike anything on earth. The mutineers heard the voice of Volmar once more:

"Out with you—and make it quick. I've no more time to waste on rubbish."

Holding his breath, Roverton approached the man-hole, crawled through, and climbed down the steel lader that ran along the outer side of the flier. The others followed him in turn. They could see little, for apparently it was night in the new world on which they were being landed. They seemed to hang over an indefinite abyss with no bottom, but on reaching the end of the ladder, they found solid ground beneath their feet. The air, though sharp and unpleasant to the nostrils, was apparently breathable. They took a few careful steps, keeping close together, on a surface that was smooth and level to their tread. While they were trying to adjust their senses to the dim surrounding, they saw the vague bulk of the flier begin to move, and then heard the prodigious roar of its ascent to the skies.

CHAPTER II

Marooned!

"MAROONED!" said Roverton, with a short laugh. "Well, there's one safe bet—we're the first mutineers who have ever been put off in Andromeda. I vote that we make the most of the experience. The air hasn't killed us yet, so evidently it contains a proportion of hydrogen and oxygen not too dissimilar from that of the earth's atmosphere. And, with such air, there is a good chance of finding plant-life, or even animal life, of types that will afford edible substances."

The three men peered about, straining their eyes in an effort to penetrate the blue-green darkness. None of them was unimaginative; and they felt the thrill of an eeriness beyond all parallel, an overpowering strangeness that preyed upon their nerves with a million intimations of unrevealed and formless things never before conceived by man. Their situation was unthinkably desolate; but behind the desolation there seemed to lurk the multitudinous and multiform teeming of unearthly life. However, they could see nothing tangible, except some vague unmoving masses that resembled large boulders. The air was a little chill, and its acrid character became more noticeable, in unison with a peculiar dankness.

The skies above were faint and vaporous, with a few stars glowing dully in their depths. Some of the stars were momentarily obscured and then disclosed, as if there were some movement or change in the occluding medium. Everywhere there was the sense of abysmal and immeasurable distance; and the mutineers were conscious of an odd, terrific vertigo, as if the horizontal spaces on all sides might draw them in like some unfathomable gulf.

Roverton stepped toward one of the boulder-like masses, taking careful note of the gravitational pull exerted by the ground. He was not quite sure, but thought that he experienced a sense of weight, of difficulty in locomotion, slightly beyond that which is felt on our earth.

"I think this world is a little larger or heavier than our own," he announced. The others followed him, and

* Andromeda is the term used to designate a section of the heavens as seen from the earth. All heavenly bodies within this section, no matter what their distance from the earth, are "in Andromeda."

were aware of like sensations. They stopped uncertainly, wondering what was to be done next.

"I suppose the sun will arise some time," observed Deming. "Delta Andromedae is a sizable affair, and seemingly the warmth it affords is comparable to that of our sun. Doubtless it will yield a similar illumination. In the meanwhile we might as well sit down and wait, if this is a bona fide boulder."

He seated himself on the dark mass, which was almost circular in form and was perhaps eight feet in diameter by three in height, with a gently rounded top. The others followed suit. The object seemed to be covered with a sort of thick, shaggy, resilient moss.

"This is luxury," exclaimed Roverton. "I'd like to take a nap." Neither he nor any of the others, however, was in any state to permit of slumber. All were ungovernably excited by the novelty of their position, and were aware of a terrible disquietude, a wild nervousness due to the shock of being plunged among alien atmospheric and geologic forces, the magnetic emanations of a soil untrod by human foot. Of this soil itself they could determine nothing, except that it was moist and was apparently devoid of grass or plant-forms.

They waited. The darkness was like the slow oozing of a cold, glaucous eternity. The mutineers carried watches, which perforce had run down during their period of incarceration. They wound and set these watches going, and struck a match occasionally to note the passage of time—a proceeding which struck them all with its absurdity, since there was no means of knowing whether or not the twenty-four hours of the terrestrial day would correspond in any manner to the diurnal period of this new world.

Hours dragged on. They talked with sporadic and feverish loquacity, in an effort to fight down the nervousness of which all were uncontrollably conscious. Srtong and mature men though they were, they felt at times like children alone in the dark, with a horde of monstrous unknown terrors pressing about them. When silence fell, the unformulable weirdness and horror of the environing gloom seemed to draw closer; and they dared not be still for very long. The hush of the dim heavens and the dimmer ground was oppressive with unimaginable menace. Once, they heard a far-off sound, like the whirring and jarring of a rusty crank. It soon ceased, and was not repeated; but at long intervals there were sharp, tiny stridulations, like those of insects, which appeared to come from the nearer distance. They were so high and harsh that the teeth of the three men were actually set on edge by them.

Suddenly, they all perceived that the darkness was beginning to lighten. A chill glimmering crept along the ground, and the boulder-like masses defined themselves more clearly. The light was very peculiar, for it appeared to emanate from the soil and to tremble upward in visible waves like those of heat. It was faintly iridescent, like the nimbus of a cloudy moon; and, gathering strength, it soon became comparable to earthly moonlight in its illuminative power. Beneath it, the soil displayed a greenish-grey color and a consistency resembling half-dried clay. The sides of the boulder-forms were plainly lit, though their tops remained in shadow. The moss-like substance covering them was of a purple hue, and was very long and coarse and hairy.

A Strange Land

THE mutineers were greatly puzzled by the light. "Is it some sort of radio-activity?" queried Roverton. "Is it phosphorescence? Is it due to some luminous micro-organism—a kind of *noctiluca**?"

He stooped down and peered closely at the trembling waves of iridescence. He gave an exclamation. The light, as it rose, seemed to be full of infinitesimal motes, which hovered about a foot from the ground at their highest flight. They poured unceasingly to this level in teeming millions.

"Animalculae of some unknown kind," decided Roverton. "Evidently their bodies are highly luminescent—one could almost read a book by this light." He took out his watch and found that the figures were clearly distinguishable.

After awhile the weird luminosity began to subside, and ebbed along the soil as it had come. The re-established darkness, however, was not of long duration. Soon the landscape declared its outlines again; and this time the illumination came in a normal manner, like the twilight of a misty dawn. A plain with barely perceptible undulations, and having scores of the boulder-forms scattered about it, was now visible for some distance, till it was lost among the streamers of curling vapor that rose all about. A sluggish, leaden-colored stream ran through the plain, about two hundred feet from where Roverton and his fellows were sitting, and vanished in the mist.

Soon the vapors, hueless at first, were tinged with deepening colors, pink and saffron and heliotrope and purple, as if an aurora were rising behind them. There was a brightening in the center of this prismatic display; and it was surmised that the solar body, Delta Andromedae, had now ascended above the horizon. The air grew rapidly warmer.

Seeing the nearby stream, the men all realized that they were excessively thirsty. Of course, the water might not be drinkable; but they decided to chance it.

The fluid was peculiarly thick, milky and opaque. The taste was a trifle brackish; but nevertheless, it allayed their thirst; and they felt no immediate ill-effects.

"Now for breakfast, if we can find it," said Roverton. "We lack nothing but food-stuffs, utensils and fuel."

"I can't see that we'll find any by staying where we are," observed Adams. "Of all the desolate holes! Let's go."

A discussion arose as to which direction they should take. They all sat down again one one of the mossy purple masses, to decide the momentous problem. The landscape was equally barren and dreary on all sides; but at last they agreed to follow the flowing of the leaden stream, which ran toward the auroral display. They were about to rise, when the boulder-form on which they were sitting seemed to heave upward suddenly. Adams found himself sprawling on the ground, but the other two were quick enough to save themselves from a like fate. Startled, they leapt away; and turning back,

* A marine animal that gives off a phosphorescence.

they saw that the great mass had opened, as if cloven through the center, revealing an immense hollow lined with a whitish material that resembled the interior of an animal's stomach. The material trembled incessantly, and a glutinous liquid welled from within it, like saliva or digestive fluid.

"Heavens!" ejaculated Roverton. "Who ever dreamt of anything like that? Is it plant, animal, or both?"

He approached the mass, which gave no sign of movement apart from the trembling. Apparently it was rooted, or deeply embedded in the ground. As he drew near, the production of the glutinous liquid became more copious.

A sharp stridulation, similar to the noises heard during the night, was now audible. Turning, the mutineers saw a most singular creature flying toward them. It was large as a Chinese teal, but presented the general appearance of an insect rather than a bird. It had four large, pointed, membranous wings, a fat grub-like body marked off into segments, a thin head with two black periscope-like attachments rising above it, a dozen long, intricate antennae, and a greenish-yellow beak shaped like that of a parrot. The body and head were a loathsome verminous grey. The thing flew past Roverton and lit on the substance he had been inspecting. Crouching down on four short, rudimentary legs, it started to sip the fluid with its beak, trailing its wings as it did so. The fluid welled as if in waves, and the wings and body of the creature were soon glistening with slime. Presently it ceased to sip, its head sank in the fluid, it struggled feebly to free itself, and then lay still.

"Ugh!" said Deming. "So that's the idea. A sort of Andromedan pitcher-plant or fly-trap. If the flies are all like that we'll need tennis-rackets for swatters."

As he spoke, three more of the insect creatures flew past, and began to repeat the actions and the fate of their predecessor. No sooner were they securely imprisoned, when the shaggy mass proceeded to close itself till the white lining was no longer discernible. The cleavage where it had opened could barely be detected; and once more the thing presented the appearance of a mossy boulder. Looking about, the mutineers saw that others of the purple masses had opened and were awaiting their victims.

"Those things could easily devour a man," meditated Roverton. "I'd hate to be caught in one of them. Let's get out of this if there is a way out."

He led the way along the sluggish stream. As they went, they saw many more of the gigantic flying insects, which paid no apparent attention to them. After they had gone a few hundred yards, Roverton almost trod on a black creature shaped like an enormous blindworm, which was crawling away from the stream. It was three feet long. Its movements were extremely torpid, and the men passed it with a shudder of repulsion, for the thing was more loathsome than either a snake or a worm.

"What's that?" Roverton had stopped, and was listening. The other also paused and listened intently. Then they all heard the sound of dull, muffled blows, at an indeterminate distance in the fog. The sound was quite rhythmic in its repetition, but ceased at intervals. When it stopped, there was a sharp, shrill, multitudinous cheeping.

"Shall we go on?" Roverton had lowered his voice cautiously. "We're without weapons; and hell knows what we'll get into. We may find intelligent beings; but there's no means of knowing beforehand whether or not they will prove hostile."

Before his companions could answer, the fog parted and revealed a singular spectacle. No more than a hundred yards down the stream, a dozen pygmy-like beings, about two feet in height, were gathered around one of the purple masses. With instruments whose general form suggested knives and axes, they were cutting away the moss-like integument from the mass and hewing great slabs of the white, fleshy material within. Even at that distance, it could be seen that the mass was quivering convulsively, as if it felt their blows.

Suddenly the hewing was suspended. Once more the cheeping sound arose. The pygmies all turned and seemed to be gazing toward Roverton and his companions. Then the sound changed and took on a high, chirping note, like a summons. As if in answer, three monstrous creatures appeared from the fog. Each of them was twenty feet in length, they were like fat lizards in their general form and had an indefinite number of very short legs on which they crawled or waddled with amazing swiftness. Each of them had four saddles of a fantastic type arranged at intervals along its back. They crouched down, as if at a word of command, and all the pygmies swung themselves with incredible celerity into the saddles. Then, to an accompaniment of shrill pitterings, the unearthly cavalcade advanced upon the travelers.

CHAPTER III

Captured!

THERE was no time to even think of fleeing. The speed of the lizard-creatures was far beyond that of the fleetest runner: in a few instants they loomed upon the three men, surrounding them and hemming them in with their mammoth length. The creatures were both grotesque and terrible, with their squat, toad-like heads and their puffed bodies mottled in sinister designs with dull blues and rusty blacks and clayish yellows. Each of them had a single bulging eye that glowed with a ruddy phosphorescence in the middle of its face. Their ears, or what appeared to be such, drooped along their jowls in wrinkled folds and hung down like wattles.

Their riders, seen close at hand, were equally bizarre and hideous. Their heads were large and globular, they were cyclop-eyed, but possessed two mouths, one on each side of an appendage like the trunk of an elephant, which depended almost to their feet. Their arms and legs were of the normal number, but seemed to be very supple and boneless, or else had a bone-structure radically different from that of earth-vertebrates. Their hands were four-fingered and were webbed with translucent membranes. Their feet were also webbed, and terminated in long, curving claws. They were altogether naked; were seemingly hairless; and their skin displayed a leaden pallor. The weapons they carried were made of some purplish metal, colored like permanganate of potash. Some were halberds with short handles; and

others were crescent-shaped knives weighted at the top of the blade with heavy knobs.

"God!" cried Roverton. "If we only had elephant-guns and automatics!"

The pygmies had stopped their mounts and were gibbering excitedly as they stared with their round orbs at the earth-beings. The sounds they made were scarcely to be duplicated by human vocal chords.

"Mlah! mlah! knurhp! anhka! hka! lkai! rhpai!" they chattered to each other.

"I guess we're as much of a novelty to them as they are to us," observed Adams.

The pygmies seemed to have arrived at a definite decision. They waved their weapons and chirped, and their lizard-steeds swung round in a semi-circle till all were in a position upstream from the mutineers. Then they advanced, and the pygmies pointed onward with their weighted knives and halberds as if enjoining the men to precede them. There was nothing to do but obey, for the lizard-creatures opened yawning mouths that were fanged like caverns of stalactites and stalagmites, when they drew near. Roverton and his fellows were forced to proceed at a marathon-like pace in order to keep ahead of them.

"They're herding us like cattle!" Roverton cried.

When they came abreast of the purple-covered mass which the pygmies had been hewing into slabs, a halt was made and the slabs were loaded into large panniers which were then attached to the backs of the monsters by means of a curious harness that looked as if it were wrought of animal intestines. The men were herded in the center of the cavalcade while this work was going on. There was no possible escape; and they resigned themselves with as much scientific calm as they could muster.

After the loading had been accomplished, the pygmies resumed their advance along the stream, driving their captives before them. The fog had now begun to lift and disappear, and a dim yellow solar orb, slightly larger than our sun, became discernible low in the heavens above a remote horizon of serrate peaks. The river turned abruptly after a mile or so and wound away through the desolate plain toward a large lake or sea that filled the further distance with a semi-hue of dull purple. Here the cavalcade left the stream, marshalling it prisoners toward the far-off mountains.

The landscape grew barer and even more desert-like in its character as Roverton and his companions stumbled onward before the gaping maws of the monsters. There were no more of the insect-devouring shaggy masses, nor even insects themselves nor any other forms of life. The plain was like a vast level of dried primordial ooze, or the bed of some vanished ocean.

Hunger and weariness assailed the men. They were driven ever onward at a merciless, unremitting pace, till they panted for breath and their muscles grew leaden with fatigue. Hours seemed to pass; but the dim sun rose no higher above the horizon. It swung in a low arc, like the sun of sub-polar lands. The mountains drew no nearer, but receded on the vast vague skies.

The plain began to reveal details hitherto unnoticed. Low hills sprang up, the undulations deepened. Bare ravines of dark, sullen, semi-basaltic stone intersected it at intervals. Still there were no signs of life, no plants, no trees, no habitations. The mutineers wondered wearily where they were being taken, and when they would reach the destination sought by their captors. They could not imagine what it would be like.

A Conference

NOW they were driven along a ravine in which ran a rapid stream. The ravine grew deeper; and sheer cliffs, increasing in height to a hundred feet or more, hemmed it in on each side. Rounding a sharp turn, the men saw before them a broad space of level shore, and above the shore a cliff that was lined with several rows of cavern-mouths and little steps cut in the stone. Dozens of pygmies, of the same type as their captors, were gathered before the entrances of the lower caves. An animated chattering arose among them at sight of the cavalcade and its prisoners.

"Troglodytes," exclaimed Roverton, feeling in spite of his fatigue the keen interest of a man of science. He and his companions were immediately surrounded by the pygmies, some of whom, on closer inspection, appeared to be of a different sex from the ones they had first encountered. There were also a few infants, the smallest of which were little larger than guinea-pigs.

The members of the cavalcade dismounted and proceeded to unload the panniers with the assistance of the others. The slabs of fleshy white substance were piled on the ground beside several large flat mortars of stone. When the unloading was completed, the pygmies laid some of the slabs in these mortars and began pounding them with heavy pestles. They made signs to the men, enjoining them to do likwise.

"I suppose the stuff is used for food," surmised Adams. "Maybe it's the staff of life among these creatures." He and the others selected pestles and started to pound one of the slabs. The material was easily reduced to a fine, creamy paste. It gave off a pungent odor that was far from unpleasant; and in spite of certain highly repulsive memories the three men became conscious that they were extremely hungry.

When all the mortars were full of paste, the pygmies began to devour it without any further formality, using not only their webbed hands but their prehensile trunks to convey the stuff to their double mouths. They motioned to the men that they also should eat.

The paste had a saline flavor and vaguely resembled a mixture of sea-fish with some nutritious root-vegetable. It was quite palatable on the whole; and it served to allay the pangs of hunger in a fairly satisfactory manner. At the end of the meal a sort of fermented beverage, yellow-green in color, was brought out in shallow vessels of earthen-ware. The taste was disagreeable and very acrid; but all fatigue disappeared after a few sips; and the mutineers were able to survey their situation with new hopefulness and courage.

Several hours were now spent in pounding up the remainder of the slabs. The paste was stored in broad-mouthed urns and these urns were carried into the lower caves. Roverton and his comrades were signed to assist in this work. The caves were too low to permit of their standing upright and were very dark and shadowy, with many ramifications of irregular size. The furnishings were quite primitive, as was to be expected; though there was a welcome degree of cleanliness. They were

full of a smoke-like smell, and in one of them a little fire was burning. The fuel resembled some sort of peat. There were tiny couches covered with furless skins, probably those of creatures similar to the lizard-things.

The low sun had gone down behind the cliffs when the last urn was carried into the caverns. A cold green twilight gathered along the stream, thickened by the rising wispy vapors. The lizard-monsters were led away to a cave larger than the rest, lying at some distance apart. Obviously it served as a kind of stable. Then the pygmies retired by twos and threes to their caverns, after indicating a grotto which the men were to occupy. Four pygmies, armed with their queer halberds and heavily weighted knives, remained on guard in front of the entrance.

Darkness flowed into the grotto like a rising sea of stealthy silent ripples. With its coming, an odd lethargy overpowered the men—a reaction from all the stress and strain and hardship they had endured, from the tax of all the new, unearthly impressions their nerves had sustained. They stretched out on the stone floor, using the little couches along the wall for pillows. In a few minutes they were asleep.

They awoke with the sound of myriad cheepings and chatterings outside their cavern in the pale mistiness of dawn.

"Sounds like a caucus," surmised Roverton as he crawled toward the entrance. Peering out, he saw that more than a hundred pygmies, half of whom must have come from some other community, were collected on the stream-bank and were seemingly engaged in an earnest debate. All of them kept looking with their round orbs toward the cave occupied by the mutineers. Their words, expressions, gestures, were so remote from anything familiar to humanity, that it was impossible to guess the trend or import of their debate, or to know whether the decision at which they were arriving was friendly or inimical.

"They give me the creeps," said Deming. "We don't know whether they're going to eat us or elect us for their tribal deities."

Apparently at a word of command, the guards approached the cavern-mouth and motioned the men to come forth. They obeyed. Platters full of the white paste and cups of a sweetish ebon-black beverage were set before them; and while they ate and drank, the whole assemblage looked on in silence. Somehow, there seemed to be a change in the attitude of the pygmies; but the nature of the change, or what it might portend, was beyond surmise. The whole proceeding was extremely mysterious and had almost the air of some sinister sacrament. The black beverage must have been mildly narcotic, for the men began to feel as if they were drugged. There was a slight deadening of all their senses, though their brain-centers remained alert.

"I don't like this," murmured Roverton. He and the others felt a growing disquietude, for which they could assign no determinate reason. They were not re-assured when the three lizard-monsters, followed by two more of a similar type, re-appeared along the stream-bank. All were mounted by armed pygmies who, when they approached, made signs that the men should precede them along their line of march. The mutineers started down-stream, with the mounted guards and the whole assemblage following them.

Soon the bank grew narrower and the walls above more precipitous. The foothold narrowed to a yard-wide path, beside which the waters rushed with sullen vehemence in a series of torrential rapids teethed with yellow foam. Passing a turn in the wall, the men saw that the bank ended in a large cavern-mouth. Beyond, the cliffs rose perpendicularly from the torrent.

The three hesitated as they neared the cavern. What fate was before them they could not conjecture; but their sense of alarm and disquietude increased. They looked back and saw that the foremost of the lizard-things was close upon them, yawning more horribly than the black cave in front. They thought of leaping into the stream; but the headlong torrent was full of sharp rocks; and a roaring from beyond the cliff betokened the nearness of a waterfall. The walls above the path were impossible to climb; so they entered the cavern.

CHAPTER IV

The Brink of Doom

THE place was quite roomy in distinction to the caves inhabited by the pygmies, and the men were not forced to stoop at any time. But, blinded with the daylight they had left, they stumbled over stones and against the winding walls as they groped in utter darkness. A gust of chill and noisome air came forth like a subterranean wind from the heart of the cavern; and one of the monsters was breathing at their heels. They could see nothing, could be sure of nothing; but perforce they must go on, not knowing if the next step would plunge them into some terrific pit or bottomless gulf. A sense of uncanny menace, of weird unhuman horror, increased upon them momently.

"This place is dark as the coal-cellars of Hades," jested Roverton. The others laughed bravely, though their nerves were on edge with sinister expectation and uncertainty.

The draft of dank, mephitic air grew stronger. The smell of stagnant, sunless waters, lying at some unfathomable depth, mingled in the men's nostrils with a nauseating reek as of bat-haunted catacombs or foul animal-dens.

"Phooey!" grumbled Deming. "This is worse than Gorgonzola and fox-guts all in one."

The floor of the cavern began to slope downward. Step by step the descent steepened like some infernal chute, till the mutineers could hardly keep their footing in the dark.

Remote and faint, like a little patch of phosphorescense, a light dawned in the depths below. The walls of the cavern, dolorously ribbed and arched, were now distinguishable. The light strengthened as the men went on; and soon it was all about them, pouring in pale-blue rays from an undiscerned subterranean source.

The incline ended abruptly, and they came out in a vast chamber full of the queer radiance, which appeared to emanate from roof and walls like some kind of radioactivity. They were on a broad semi-circular shelf; and, crossing the shelf, they found that it terminated sharply and fell sheer down for perhaps fifty feet to a great pool in the center of the chamber. There were ledges

on the opposite side of the cavern at the same level as the one on which they stood; and there were smaller caves that ramified from these ledges. But apparently none of the caves was attainable from the ledge where the incline had ended. Between, were perpendicular walls that could afford no moment's foothold anywhere.

The three men stood on the brink above the pool and looked about them. They could hear the shuffling of the first lizard-monster on the incline and could see the baleful glaring of its single eye as it came forward.

"This looks like the last page of the last chapter." Roverton was now peering down at the pool. The others followed his gaze. The waters were dusky, stirless, dull, ungleaming, beneath the bluish glow from the cavern-sides. They were like something that has been asleep or dead for thousands of years; and the stench that arose from them suggested ages of slow putrefaction.

"Good Lord! what is that?" Roverton had noticed a change in the waters, an odd glimmer that came from beneath their surface as if a drowned moon were rising within them. Then the dead calm of the pool was broken with a million spreading ripples, and a vast head, dripping with loathsome luminescence, upreared from the waters. The thing was seven or eight feet wide, it was hideously round and formless and seemed to consist mainly of gaping mouths and glaring eyes all strewn together in a mad chaos of malignity and horror. There were at least five mouths, each of them large enough to devour a man at one swallow. They were fangless, and elastically distensible. Scattered among them, the eyes burned like satanic embers.

One of the lizard-monsters had crawled forth on the shelf. Scores of the pygmies were crowding beside and behind it, and some of them now advanced till they were abreast of the men. They stared down at the fearsome thing in the pool and made uncouth gestures and genuflections with heads, hands and long prehensile trunks, as if they were invoking or worshipping it. Their shrill voices rose in a rhythmically wavering chant.

The men were almost stupefied with horror. The creature in the gulf was beyond anything in earthly legend or nightmare. And the rites of obeisance offered by the pygmies were unbelievably revolting.

"The thing is their god," Roverton cried. "Probably they are going to sacrifice us to it."

The ledge was now thronged with pygmies; and the lizard-monster had pushed forward till the three men had no more than standing room on the brink of the gulf, in a crescent-like arc formed by its body.

The ceremony performed by the pygmies came to an end, their genuflections and chantings ceased, and all turned their eyes in a simultaneous unwinking stare on the mutineers. The four who were mounted upon the lizard-creature gave vent in unison to a single word of command:

Into the Stream!

"*PTRAHSAI!*" The monster opened its maw and pushed forward with its squat jowl. Its horrible teeth were like a moving portcullis. Its breath was like a fetid wind. There was no time for terror, and no chance to resist: the men tottered and slipped on the narrowing verge, and toppled simultaneously into space. In his fall Roverton clutched automatically at the nearest of the pygmies, caught the creature by its trunk, and bore it along as he hurtled through the air. He and his companions plunged with a huge splash into the pool and sank far below the surface. With a concerted presence of mind they all came up as close to the cavern-wall as they could and began to look for possible footholds. Roverton had not lost his grip on the pygmy. The creature howled ferociously when its head came above the water, and tried to claw him with its long toe-nails.

The precipice was bare and sheer from the water's edge, with no visible break anywhere. The men swam desperately along it, searching for an aperture or a ledge. The thing of mouths and eyes had begun to move toward them, and they felt sick with terror and repulsion at the sight of its slow, phosphorescent gliding. There was damnable deliberation, a dreadful leisureliness in its motion, as if it knew that there was no way in which its victims could evade the elastic yawning of those five abominable mouths. It approached, till the cavern-wall beside the swimmers grew brighter with the foul effulgence of its looming head. They could see beneath and behind the head the distorted glowing of a long, formless body submerged in the black abysses of the pool.

Roverton was nearest to the monster when it came abreast. Its malignant bulging eyes were all bent upon him and its foremost mouth opened more widely and slavered with an execrable slime. Now it loomed athwart him, and he could feel the unutterable corruption of its breath. He was driven against the cavern-wall; and, managing to steady himself for a moment, he pushed the pygmy toward the approaching mouth. The pygmy yelled and struggled in a frenzy of fear till the awful slobbering lips had closed upon it. The monster paused as if its appetite and its curiosity were appeased for the nonce; and the three men took advantage of this to continue their exploration of the wall.

Suddenly they perceived a low aperture in the smooth cliff, into which the waters flowed with a gentle rippling. The aperture was narrow and its roof was not more than a foot above the surface. It might or might afford an escape from the pool; but no other possible exit could be detected. Without hesitation Adams swam into the opening and the others followed him.

The water was still deep beneath them and they did not touch bottom anywhere. The walls of the little cavern were luminous at first; but the luminosity soon ceased and left them in absolute darkness. As they swam onward, they could no longer judge the extent of the air-space above them. At no time, however, were they compelled to dive beneath the surface; and they soon found that the cave was now wide enough to permit their moving side by side. They perceived also that they were caught in the flow of an ever-strengthening current which carried them on with considerable velocity. Since there was no sign of pursuit from the monster in the pool, the men began to feel a faint quickening of hope. Of course the stream might carry them to the very bowels of this terrific transstellar world, or might plunge at any moment into some dreadful gulf; or the roof might close in and crush them down beneath the noisome strangling waters. But at any rate they felt that there was a chance of ultimate emergence; and any-

thing, almost would be better than the proximity of the luminescent monster with mephitic breath and myriad eyes and mouths. Probably the cave in which they now swam was far too narrow to permit the entrance of its loathly bulk.

How long the three men floated in the swiftening current, it was impossible for them to know. As far as they could tell, there was no change in their situation; nor could they estimate how far they had gone in this underground world. The darkness weighed upon them, seemingly no less opaque and heavy than the water itself and the cavern-walls. They resigned themselves to the obscure progression of the stream, saving their strength as much as possible for any future emergency that might arise.

At length, when it seemed that they were irretrievably lost in the solid abysmal murk, when their eyes had forgotten the very memory of sight, the darkness before them was pierced by a pin-point of light. The light increased by slow, uncertain degrees, but for awhile they were doubtful as to its nature, not knowing whether they were approaching another vault of phosphorescence, or the actual outer daylight. However, they were thankful for its dim glimmering. The stream had become still swifter and rougher, with boulder-cloven rapids in which their descent was impetuous and dangerous. More than once the men were almost thrown against the dark and jagged masses that towered about them.

All at once the current slackened and the seething rapids died in a broad pool above which the arching of the lofty cavern-dome was now discernible. The light poured in a stream of pale radiance across this pool, from what was evidently the cavern's mouth; and beyond the mouth a large sheet of sun-white water stretched away and was lost in the luminous distance.

All three men were suddenly conscious of a crushing, dragging fatigue—an overwhelming reaction from all the peril and hardship they had undergone. But the prospect of emergence from this underworld of mysterious horror prompted them to summon their remaining strength; with sodden limbs, they swam toward the cavern-mouth and floated through its black arch into the silvery dazzle of a great lake.

CHAPTER V

Into the Pouch

THE lake was probably the same body of water they had seen from afar on the previous day. Its aspect was ineffably weird and desolate. High cliffs with many buttresses and chimneys overhung the cavern from which they had emerged, and ran away on either side in gradually descending lines till they ceased in long flats of ooze and sand. There was no trace of vegetation anywhere—nothing but the swart stone of the cliffs, and the grey mud of the marshes, and the wan, dead waters. And at first the men thought that there was no life of any kind.

They swam along the cliff, looking for a place to land. The levels of ooze and sand were seemingly miles away; and their progress in the sluggish lake was excruciatingly slow and tedious. They felt as if the strange, lifeless waters had soaked them to the bone; and a deadly inertia dragged them down and drugged their very senses till everything became blurred in a monotone of faintness. They were all too exhausted to speak or even think. Dimly, despairingly, they plowed on toward the receding goal of the far-off shore.

Somehow, they were aware that a shadow had fallen upon them, breaking the diffused glare of the foggy sun. They were too weary to look up, or even speculate as to the origin of the shadow. Then they heard a harsh, jarring cry and a beating as of stiff, enormous wings, and something swooped down and hovered above them.

Turning their heads in the water, the three men saw an incredible sight. The thing that shadowed them was a mammoth bird-like creature with ribbed and leathern wings that were at least fifty feet from tip to tip. It suggested that prehistoric flying monster, the pterodactyl; and also it suggested a pelican, for beneath its seven-foot beak there hung a prodigious pouch.

Scarcely crediting their eyes, the swimmers stared at the hovering apparition. It glowered upon them with malevolent orbs of fire big as dinner-plates; and then, with horrible swiftness, it descended. Adams, who was nearest, felt the huge beak close upon him and lift him from the water; and before he could realize what was happening he found himself in the interior of the pouch. Deming was seized and deposited beside him a moment later; and Roverton, who had instinctively dived beneath the surface, was retrieved and drawn out by the questing beak as if he had been a flounder, and joined the other two.

Utterly stunned, they groped about in the noisome darkness of the pouch and were thrown prostrate in a heap as they felt the monster rise and soar heaven-ward. There were eel-like things that squirmed beneath them; and they breathed a medley of suffocating stenches. They could see nothing; but the gloom in which they lay was not absolute blackness, for the walls of the pouch were sufficiently permeable by light to create a blood-like dusk. The men could hear the loud beating of the leathern wings, could feel the rhythmic throb of their vibration; and while they were trying to habituate themselves to the unique situation, they had the sense of being borne onward in vertiginous flight at a great altitude.

Roverton was the first to speak.

"Of all the ineffable predicaments! Even a fiction-writer wouldn't dare to imagine this. I suppose the creature has a nest somewhere and is carrying us home to provide food for its young or its mate."

"Or," suggested Adams, "having caught a supply of live meat, it's going off somewhere to secure its vitamines."

A faint laughter greeted the jest.

"Well," put in Deming, "we're getting a free ride, anyhow—for once we're not having to walk, run or swim."

Time passed in a doubtful, confused way. The beating of the wings had died to a swish of rushing air as about the unflapping level flight of some giant vulture or bird of prey. Still there was the sense of prodigious speed, of horizon on horizon left behind, of plains and waters and mountains slipping away beneath in a swift recession.

The men grew sick and dizzy with the noxious air

of their prison, they fell into periods of semi-consciousness from which they revived with a start. In the novel horror of their position, they almost lost the feeling of identity. It was as if they were part of some monstrous dream or hallucination.

After an undetermined lapse of time, they felt a slackening of the headlong flight and then heard once more the thunderous flap of those huge wings as the bird sank groundward. It seemed to descend from an alp-surpassing height, with tremendous velocity.

Now the descent was arrested with abrupt ease, like the stopping of an elevator. A sudden glimmering of light in the interior of the pouch, and Roverton and his companions were aware that the creature had opened its bill as if to seize something. Then, with a raucous, deafening cry, it began to thresh about as in some stupendous convulsion, and the men were thrown violently from side to side in the tossing pouch. It was impossible to imagine what had happened—the whole occurrence was supremely mysterious and terrifying. Adams and Deming were knocked almost senseless by the shaking they received; and Roverton alone was able to retain anything like full cognizance. He realized that the bird was engaged in some sort of struggle or combat. After a brief interval its heavings became less tumultuous and powerful; and at last, with one hoarse, diabolic shriek, it appeared to collapse and lay still except for an occasional shuddering that shook body and neck and was communicated to the pouch. These shudderings diminished in force and frequency. The bird was now lying on its side, and the light entered the pouch directly through its wide-open beak.

Making sure that his companions had recovered their senses, Roverton crawled toward the light. The others followed in turn. Wriggling out through the slimy mouth, from which a frothy blood-like fluid was dripping, Roverton stood up dizzily and looked around.

A New Horror

THE scene upon which he had emerged was wilder and madder than the grotesqueries of fever-delirium. For an instant he thought that the things about him were products of hallucination, were born of his overwrought nerves and brain. The flying monster was stretched on the ground and was wrapped from head to tail in the coils of something which Roverton could only designate to himself a a vegetable anaconda. The coils were pale-green with irregular brown and purplish mottlings and were manifestly hundreds of feet in length. They terminated in three heads covered with mouths like the suckers of an octopus. The coils had encircled the bird many times, and were evidently possessed of enormous constrictive power, for they had tightened upon their prey so that the body bulged between them in loathsome knots and protuberances. They were visibly rooted in a black, viscid-looking soil, and were swollen at their base like the bole of some ancient tree. The three heads had applied themselves to the back of their prostrate victim and were obviously drawing sustenance from it with their myriad suckers.

All around, in the veering vapors that rose from the ground like steam, there loomed the tossing tops and writhing trunks, branches and feelers of a medley of half-ophidian or half-animal plant-forms. They varied in size from vines that were no larger than coral snakes, to amorphous bulks with a hundred squirming tentacles, huge as the kraken of mythology. They were no less diverse than the plant-forms of a terrestrial jungle, and all of them were hideously alive. Many were devoid of anything that suggested leaves; but others had finger-like fronds or a sort of foliage that resembled a network of hairy ropes, and which undoubtedly served the same purpose as a spider web, for in some of these nets queer, uncouth insects and birds had been caught. Others of the tree bore tumescent oval or globular fruits, and fleshy-looking flowers that could close like mouths upon their prey. Overhead, through the steaming vapors, a hot, swollen sun flamed down from an almost vertical altitude. Roverton realized that the bird-monster, flying at many hundreds of miles an hour, must have carried himself and his companions to a sub-tropic zone of the world in which they where marooned.

Adams and Deming had now crawled out and were standing beside Roverton. For once none of the three could utter a word, in the profound stupefaction with which they surveyed their surroundings. Instinctively they all looked for an avenue of escape in the rows of vegetable monstrosities that hemmed them in on all sides. But there was no break anywhere—only a writhing infinity of things that were plainly poisonous, maleficent and inimical. And somehow they all felt that these plant-entities were conscious of their presence, were observing them closely, and, in some manner not cognizable by human senses, were even discussing or debating them.

Adams ventured to take a step forward. Instantly a long tentacle shot out from the nearest of the kraken-like forms and encircled him. Struggling and screaming, he was drawn toward the great dark lumpish mass from which the tentacles emanated. There was an open cup-like mouth of vermilion, fully a yard wide, in the center of this mass; and before his companions could even move, Adams was thrust into the mouth, which forthwith closed upon him like the mouth of a tightened sack. Roverton and Deming were petrified with horror. Before they could even think of stirring from where they stood, two more of the tentacles shot out and gripped each of them about the waist. The grip was firm as an iron rope; and both were conscious of a sort of electric shock at the contact—a shock which served to stun them still further. Almost fainting, they were held erect by the horrible coils.

Nothing more happened for a brief interval. The incomprehensible strangeness of their position, the manifold fatigues and ordeals of the day, together with the shock of those coils, had dazed the two men so that they could hardly grasp the fate of their companion and their own imminent doom.

Everything became unreal, misty, dream-like. Then, through the vagueness that enveloped their senses, they saw that the dark mass at the core of the tentacles was beginning to move and heave. Soon the heavings turned to convulsions that became more and more violent. Roverton and Deming fell to the ground as the coils loosened their hold, and saw the lashing of a score of tentacles in the air above, tossing from side to side about the agitated central mass. Then, from this mass, the body of Adams was ejected, to fall beside Roverton and

Deming. Obviously human flesh had not agreed with the digestion of the Andromedan plant-monster. The mass continued to heave and palpitate, and its myriad arms waved through the air as if in agony.

The two men dared not look at the body of their erstwhile comrade. Sick, and utterly spent with weariness and horror, they lay prostrate on the ground. After awhile they felt the tentacles encircle them once more; but they were not drawn toward the central mouth but were lifted and dragged away toward the tangle of unearthly forms behind the vegetable kraken. Here they were caught by the supple serpentine limbs of other living plants and were drawn onward through the jungle.

They were dimly aware of multiform mouths that gaped or puckered in the air beside them, they felt the antennae-like tendrils that swayed and groped, they saw the poising branches armed with dart-like thorns, they saw the crimson ell-wide blossoms with cloven tongues from which a venomous honey dripped. And all around they heard the moan or shriek or hiss of animals snared by the demoniacal growths, and saw the yawning mouths that devoured their victims bodily, or the suckers that fastened upon them like the lips of vampires. But among these terrors and horrors of a transstellar flora the two men passed unharmed, untouched, and were drawn from coil to lethal coil, from net to fatal net, through the unimaginable woods. It was as if all these carnivorous and deadly things had been warned of their inedible nature, and were thrusting them away.

At length the light grew stronger and the men perceived that they were approaching the jungle's edge. The last of the plant-krakens gave them a vehement fling with its great arms, and the steaming soil of a flat, treeless plain hovered and reeled before them as they fell unconscious in the open sunlight.

CHAPTER VI

The Great Plain

ROVERTON was the first to recover his senses. Feeling very weak and dizzy, with blurred thoughts and vision, he tried to sit up, and fell back helplessly. Then, as his eyes and brain began to clear, a little strength returned to him, and a second effort was more successful. His first thought was of his comrade, for whom he now looked. Deming still lay where he had fallen, in a prone and sprawling posture.

Several hours must have elapsed, for the sun was now hanging above the edge of the plain, and the tall, columnar vapors were tinted as with the flames of an aurora. The very soil itself, wet and glistening, had taken on a reflection of prismatic hues. Turning, Roverton saw behind him at a little distance the fearsome jungle from which he and Deming had been so summarily ejected by the sarcophagous trees and plants. The jungle was comparatively quiescent now; but its branches and boles were still swaying slightly; and a low, sibilant sound arose from among them like the hissing of an army of serpents.

Roverton managed to stand up. He tottered like a fever-patient, and could scarcely keep from falling. His mouth was parched and fiery with an all-consuming thirst; and his head throbbed like a beaten drum Seeing a pool of water not far away, he started toward it, but was forced to finish his journey on hands and knees. He drank, and felt amazingly refreshed by the dark, butterish fluid. Filling his cap (which he had somehow managed to retain through all the vicissitudes of the past two days) with the water, he went back to his companion, walking erect this time, and sprinkled some of the fluid on Deming's face. Deming stirred, and opened his eyes. In a brief while he was able to drink the remainder of the contents of the cap, and then succeeded in standing up and taking a few steps.

"Well, what's the next number on the program?" he queried. His voice was cracked and feeble, but indomnitably gallant.

"Damned if I know," shrugged Roverton. "But I move that we get as far as possible from that beastly jungle." Neither he nor Deming could bear to think of Adams' fate or the abominable things they had seen and heard and felt. The whole experience was unendurable to human nerves, and revulsion sickened the two men as the memory of it arose on the threshold of their brains. Resolutely they turned their backs to the carnivorous forest, and staggered away toward the dim and fuming horizon with its banners of rainbow splendor.

The landscape through which they now wandered was like the bottom of a newly dried ocean. It was one vast level of reeking clay, of a peculiar consistency, which yielded a little like rubber or some resilient fabric beneath their feet, without breaking through. The sensation afforded by treading upon it was uncanny and disconcerting. At every step they full expected to sink down in some bog or quicksand. They realized why they had not suffered any contusions or broken bones when the living trees had hurled them forth with such irresistible violence.

There were many pools of water in the plain; and once the men were compelled to deviate from their course by a narrow, winding lake. The aspect of the resilient ooze was indepictably monotonous and was unrelieved by any vegetable growth or outcropping of mineral. But somehow it was not dead, but conveyed a sense of somnolent vitality, as if it possessed a dark, secret life of its own.

The vapors parted in the oblique rays of the sun. Not far ahead, Roverton and Deming now perceived a low, table-like elevation. Even at first sight, it suggested an island; and as the men neared it the characteristics it revealed were indicative that it really had been such, and that the plain around it had been the bed of a shallow sea at no very ancient date. There were wave-marks in the soil about the base; and, in contradistinction to the utter barrenness of the plain, there were boulders and tree-forms on its long undulating sides; and several ruinous walls and monoliths of an unearthly architecture were visible on the broad, flat summit.

"Now for some Andromedan archaeology," Roverton commented, pointing to the ruins.

"Not to mention some more botany," added Deming.

Both of them peered with considerable caution and trepidation at the foremost trees and pants. These were similar in type to the the monstrosities of the jungle; but they were more sparse and scattered; and somehow there was a difference. When Deming and Roverton approached them the nature of the difference became

manifest. The ophidian branches drooped and trailed on the ground, and were strangely still and unmoving. Seen close at hand, they were withered and mummified. It was evident to these scientists that the trees had long been dead.

Not without repulsion, Roverton broke off the end of one of the hanging tentacles. It snapped easily; and he found that he could crumble it into fine powder between his fingers. Realizing that there was nothing to be feared, he and Deming began to climb the slope toward the fantastic ruins.

The soil of the hill, a sort of grey and purple marl, was firm beneath their feet. They reached the summit as the sinking sun began to disappear behind a far-off line of cliffs that rose like the core of a continent from the plain.

Circled about with rows of the dead plant-monsters, there stood in the center of the summit the strange ruins that Roverton and Deming had descried from below. They gleamed in the light with a dull luster, and appeared to be made of some foreign stone that was heavily impregnated with metal. They were apparently the remnants of several immense buildings, and bore the marks of some awful cataclysm that had carried away their super-structures and even much of the floor-work and foundations. One of the walls retained a door-way that was oddly high and narrow and was wider at top than at bottom. Also, there were some queer windows close to the ground. The men wondered at the physical characteristic of the race that had reared such edifices. From a human stand-point everything about the ruins was architecturally abnormal.

Roverton approached one of the monoliths. It was square in shape, was forty feet high by seven in diameter, and had manifestly been taller at one time, for the top was riven and jagged where it had been broken off abruptly. It was wrought of the same material as the walls. A series of bas-reliefs, intermingled with columns of hieroglyphic letter-forms, had been carved about the base. The bas-reliefs depicted beings of a curious type, with long thin trunks terminating at each end in a multitude of many-joined limbs. The heads of these creatures, or what appeared to be such, were at the nether extremity of the trunks, and had two mouths that were set above a double row of eyes. Ear-like appendages drooped from the chins. The lower limbs ended in bird-like claws and the upper in broad, umbrella-shaped webs whose use was beyond conjecture. Roverton exclaimed with amazement as he called Deming's attention to these figures. Whether such beings represented an extinct race, or whether their prototypes were still to be found in this outré world, was of course an irresolvable problem. But the men felt that this mystery too would soon be solved. It would be solved whether they liked it or not.

The men were too worn out with their herculean ordeals to devote much time and energy to speculation of this order. They found a sheltered place in the angle of one of the walls, and sat down. Perforce they had eaten nothing since the food provided by the pygmies at early dawn; and seemingly there was no immediate prospect of finding any. They were desperate and there seemed no hope to lighten the depression that closed in about these doomed men.

CHAPTER VII

Volmar Again!

THE sun had gone down, leaving an erubescent twilight that stained the soil, the ruins and the dead trees as with a deepening tide of blood. A preternatural silence prevailed— a silence fraught with the sense of foreign mystery, the burden of ultramundane antiquity that clung to those strange ruins. The men lay down and began to doze.

They awoke simultaneously, without knowing for a brief moment what it was that had aroused them. The twilight had turned to a rich violet, though the walls and trees were till clearly distinguishable. Somewhere in this twilight, there was a shrill, strident humming that grew louder momentarily.

All at once the humming was near at hand, in mid-air. It soared to a deafening clamor. Roverton and Deming saw that a swarm of giant insects with curving five-inch bills were hovering about them as if uncertain whether or not to attack. There seemed to be hundreds of these formidable-looking creatures. One of them, bolder than the others, darted forward and stung Deming on the back of his left hand till its beak almost protruded from his palm. He cried out with the pain, and struck the insect with his other fist. It squashed beneath the blow and fell to the ground, emitting a nauseous stench.

Roverton sprang to his feet and broke off a bough from one of the trees. This he waved at the swarm, which retreated a little but did not disperse. An idea came to him, and he thrust the bough into Deming's hand, saying:

"If you can keep them off, I'll try to build a fire."

While Deming waved his ineffectual weapon at the hesitating army, Roverton broke off more of the dead, tentacle-like boughs, piled them, and crushed others into a heap of fine dust with his heel. Then, in the twilight, he found two small fragments of the metallic stone from which the buildings had been wrought; and striking the fragments together, he obtained a spark which fell into the dust-pile and ignited it. The stuff was highly combustible, for in less than a minute the heap of boughs was burning brightly. Terrified by the blaze, the insects fell back; and their stridulation soon diminished and sank away in the distance.

Deming's hand was now painfully swollen and throbbing from the sting he had received.

"Those brutes would have finished us if they had been nervy enough to attack in force," he observed.

Roverton piled more fuel on the fire, in case the swarm should return.

"What a world!" he ejaculated. "I wish Volmar were here, confound him!"

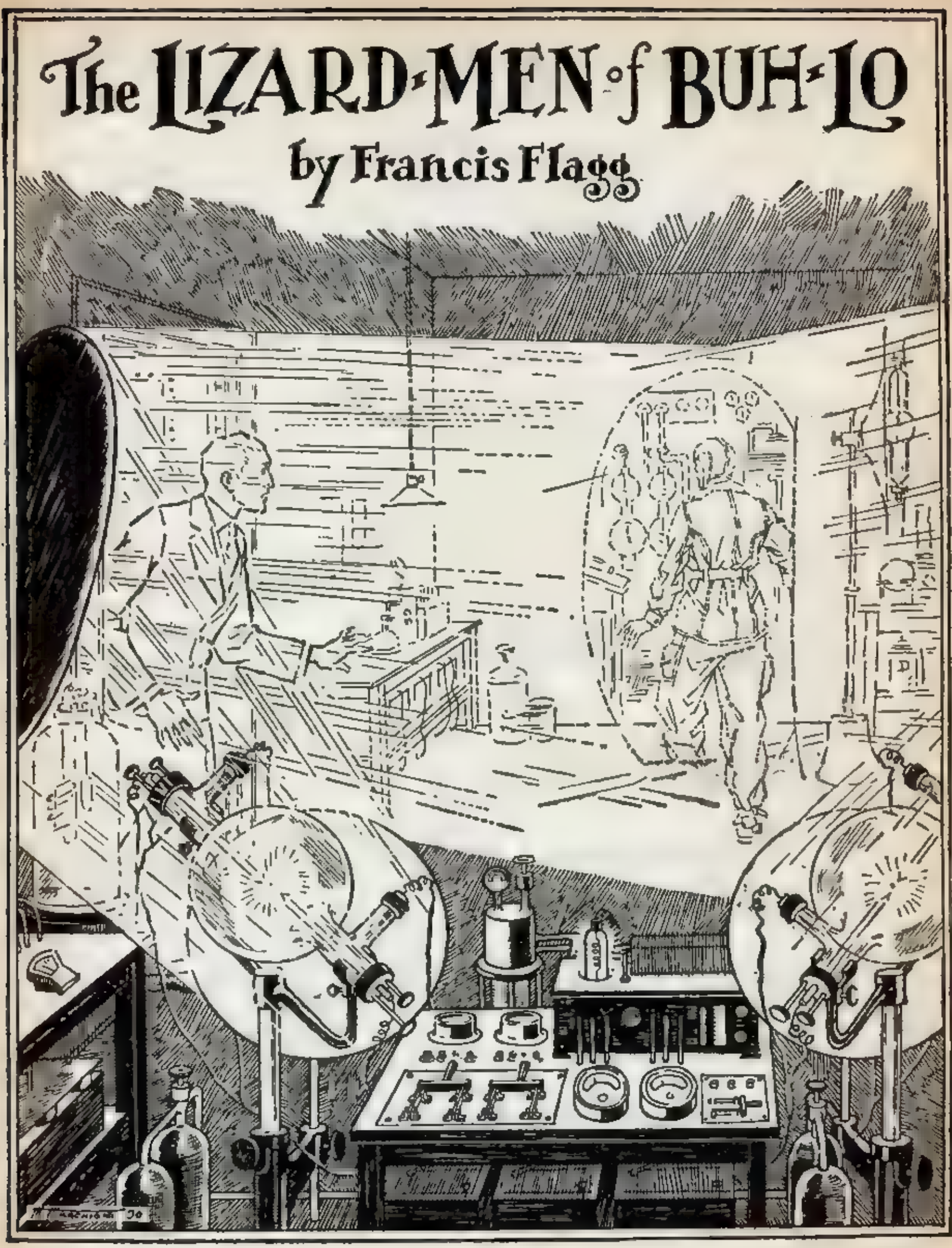
As he spoke, there was a far-off droning in the crepuscular sky. For a moment, the men thought that the insect swarm was coming back to assail them again. Then the droning deepened to a great roar. The roar was somehow familiar, though neither could determine at first the memory which it tended to evoke. Then, where stars were beginning to pierce the vague heavens, they saw the indistinct bulk that descended toward them.

"My God! Is that the space-flier?" cried Deming.

(*Concluded on page* 465)

The LIZARD-MEN of BUH-LO

by Francis Flagg



(*Illustrated by Marchioni*)

For William Swift reached out into space where nothing could be observed and pulled open a door. I rubbed my eyes. He had clambered through a hole in space and vanished!

I AM an old man, eighty years of age now, and the story I tell a curious one. You will not believe it, perhaps, and indeed there are times when I can hardly credit it myself.

It is more than sixty years since I first made the acquaintance of William Swiff. I never knew the source of his vast fortune nor anything of his antecedents. But he was a mysterious fellow with something of the Oriental in his looks and his manner, although he was as blond as a Nordic, tall and lithely built, with a distinguished carriage and a handsome face.

We became acquainted with one another in a physics class. I wasn't particularly interested in physics, merely taking it to make up a prescribed number of subjects, but William Swiff was passionately devoted to it.

The professor of physics did not like William Swiff. In fact none of his professors cared for him. For unlike most of the students, he never took anything for granted, and was always asking the most disconcerting questions. From the problems at hand and under discussion, he would wander off into the most fantastic speculations, which angered the instructors. The truth was that William Swiff possessed more intelligence than his teachers. They sensed it too, and naturally that didn't endear him to them.

FRANCIS FLAGG

On the campus he was pointed out as quite an eccentric. With his wealth and undoubted charm of manner it was inevitable that he should be "rushed", that many boys and girls would seek his friendship, that fraternities should try to claim his allegiance, but in spite of all efforts none succeeded in becoming intimate and the social activities of college failed to engulf him. He took a whole house to himself on Scenic Drive in Berkeley, installed a man-servant and a cook, and immediately became engrossed with mysterious undertakings of his own.

I have said that William Swiff and I became acquainted in a physics class. For some obscure reason he singled me out as a friend. Perhaps it was because I was a good listener. I really was interested in what he said. Our friendship started at the beginning of our second year when he stopped me as I was leaving the lecture hall, and asked in his most casual manner:

"What's the hurry, Jim?"

"Work," I said briefly. "You know I'm waiting table in a 'frat' house."

"Yes," he frowned, "slaving like hell to pay your way through college while I'm rolling in wealth. Doesn't sound fair, does it?"

"Oh, well," I said philosophically, "nothing seems very fair in this unbalanced world."

He laid his hand on my arm. "I've a proposition to make. You know I live in a barrack all to myself. There's room for you, and to spare. I need a chap to look after my papers, type my notes, and so forth. You'd eat with me, of course. What do you say?"

"Say!" I exclaimed. "That it sounds too good to be true. Only . . ."

"Oh," he said, "we'll get along together. I haven't watched you for a year for nothing. This isn't a sudden whim on my part."

So it was that I became a part of William Swiff's household.

He had, as I have stated, two servants—a man and a woman. The man kept his master's rooms tidy, the woman cooked and busied herself with various duties. The house was large, setting back from the road in several acres of ground. A large library was on the second floor. Adjoining this William Swiff had his laboratory, workshop and lounge-room, really two rooms knocked into one. The library amazed me at first. There were, besides hundreds of textbooks on science and philosophy, numerous scientific magazines, quite a few works of fiction, Verne, Wells, Algernon Blackwood, Poe, and a volume of O'Brien's short stories. But the thing that struck me as a most incongruous sight in those surroundings were the stacks of scientifiction magazines.

"Good Lord! who reads that truck — the servant?"

"The servant," laughed William Swiff. "Catch Powell reading anything of the sort. His taste is more catholic than that. Powell reads only the highbrows in literature; the more stodgy of Wells' novels, Willa Cather, Hemingway, Mencken's reviews."

"You don't mean to say the cook . . ."

"No, the cook is a New Thoughter. She reads Madame Blavatzky, Besant, travel books, Unity."

"Then who . . ."

FEW adventures have been penned that are stranger than the one our author presents us with now. Yet, despite its strangeness, the story has a quality that makes it very real, and the editors felt that in this story our author has really set a new standard of excellence for himself.

Romance, adventure and mystery are truly combined here to set off a perfectly stupendous scientific idea—and that is that in other dimensions time and space might be very much different than they are in ours. We learn by the Einstein theories that our conception of time is only relative, and that to two people watching a certain event different lengths of time might elapse during the occurrence.

This puzzle with regard to things such as time and space, which we used to regard as fixed and absolute, are only the few that confound us in our lack of knowledge of our universe. And when such questions are woven as they are at present into a fascinating story, they become the most interesting subjects for endless speculation.

He smiled at my bewilderment. "I read them; they're mine."

"For heaven's sakes, what do you read them for?"

"For their ideas. Oh, I agree with you that as literature some of the stories fall below par! They lack the finish of a Wells or a Verne. I read them for their ideas. Not all the stories have good ideas, but here and there are some that fire the brain of a scientist like me."

He was only twenty-two years of age at the time, a student in college, yet he called himself a scientist. It indicates the respect I already entertained for him that I never thought of smiling.

"Yes," he said, "a scientist must be an exact creature of figures and test-tubes and retorts. But the scientist who becomes too much so will seldom get anywhere. Now the authors of those stories dare to dream, to speculate; they are not held down by fear of ridicule, by the impossibility of what they suggest; they are the metaphysicians of science. Now left to myself, I have little creative imagination, but I have the exactness of the true scientist in my system. Those stories give me information; they augment my creative faculties. With my equipment as a trained scientist I pick and choose from among them, and experiment . . ."

He broke off to search for a magazine.

"Listen to this," he said. "I am reading from a story called 'The Machine Man of Ardathia,' a story, by the way, not without some literary merit."

He read: "Then came the Tri-Namics. More advanced than the Bi-Chanics, they reasoned that old age was caused, not by the passage of time, but by the action of the environment on the matter of which men were composed. It is this reasoning which causes the men of your time to experiment with chicken hearts."

"Lord," he said, looking up, "doesn't that sweep the imagination! But here is more of it. 'The Tri-Namics sought to perfect devices for safe-guarding the flesh against the wear and tear of environments. They made envelopes—cylinders—' "

Tossing the magazine aside, he paced the room.

"Of course," he said, "I know about those experiments with chicken hearts—I've done a trifle in that line myself—and about the theory of environment aging organisms; but it took such a story as that to make me realize the possibilities of developing a method whereby . . ." He broke off, laughed shortly, and left the room.

Five Years Pass

WILLIAM SWIFF was not given to many such half-confidences. As a matter of fact he spoke rarely and might go a month without uttering a syllable beyond the common amenities of the day. Sometimes he had his meals served to him in the laboratory, taken there on a tray, and I would eat by myself. When he came to the dinner table it was often in soiled clothes, with lowering brow, sullen even, for William Swiff could be as sullen as a cross child when things went wrong with his experiments.

He never invited me into his laboratory at this time and I never presumed to trespass. Once Powell shook his head and gave it as his opinion that if William Swiff didn't stop fooling with certain machines and explosives, he was going to blow himself into another and, Powell piously hoped, better world. In fact, more than once I was startled at hearing sudden and sinister booms. One of them actually rocked the house. It was following that particular one, and for a week thereafter, that William Swiff carried his arm in a sling (it was only burned and sprained, I believe) and wore certain vivid bruises on his face. True to my resolve, however, I asked no questions, expressed no curiosity or unwanted sympathy, and have reason to believe that this pleased William Swiff and cemented our growing friendship.

It was from the notes I typed for him that I received some inkling of his ideas; and yet not so much after all, most of the notes being jotted down with algebraical brevity, in abbreviations understandable to no one but their author.

Thus things went for two years (William Swiff kept me employed through the holidays or took me with him on long automobile treks through Nevada and Southern Arizona) when without the formality of waiting for a degree he left college to travel abroad.

"There are great men in Europe," he said. "I want to study under them."

The house was closed up, the cook dismissed. I was, I must admit it, rather hurt at the cavalier way in which I had been turned out. William Swiff had expressed no concern about my finances or my future. "Selfish dog," I thought bitterly. But within three days of his departure a letter from his bankers informed me that William Swiff had arranged to pay me a monthly income during his absence. There was a brief note from Swiff himself.

'Dear Jim: I still consider you in my employ. Do not hesitate to take the income. I am not too proud to take a far larger one that I never earned. And don't worry about the future. When I return from abroad we shall see about that."

Five years went by without another word from William Swiff; then at the end of the fifth year (it was in the fall of 1933 to be exact) he walked into my chambers without preparing me for his arrival. I saw at once that the years had changed him. He looked older than myself, though I was a year his senior. His mouth had become firmer, if possible, the eyes more penetrating. Where there had been a boyish arrogance in the cock of his head there was now a tilt of conscious power and ability. One felt it almost like a blow.

"Well," he said, "Powell and I are back and I'm opening up the old place. You'll come with me, of course; I need a secretary badly. The fact is, Jim, half your duties will be to take the ordinary business of living off my shoulders, act as a buffer between myself and all the busybodies who will try to make life a burden. Thank God, I've no relatives; that's a blessing; and it's up to you to interview all visitors and put a flea in their ears."

CHAPTER II

A New Life

I FOUND that without my knowledge the estate on Scenic Drive had been greatly changed. A low brick structure stood in the rear of the house, quite

a sizable one, newly erected. This proved to be a laboratory and workshop. William Swiff showed me through it. To my eyes it was a queer place, furnished with all the appliances of science, and looked not unlike the den of some medieval alchemist. Not that I had ever seen one! the expression is used merely to denote that the vast room impressed me as being a bizarre and even a weirdly mysterious place.

There were gleaming glass tubes and alembics, annealed retorts, the crystal clearness of objects I could not name. One corner of the room was fitted up as a machine shop. I saw electric blow furnaces, strange devices one could well imagine instruments of torture. Involuntarily came the thought of inquisition chambers, racks and thumbscrews. Yet here was no dungeon of horrors, no dark crypt devoted to ancient alchemical rites, such as the union of the Red King with the White Queen, but a matter-of-fact temple of the machine age devoted to the interests of modern science; yet how terrible it looked, how mystical.

And was it not terrible, was it not mystical? More terrible, more mystical, than ever were the rites of ancient seekers after the philosopher's stone or of the Rosicrucian mysteries. For I saw microscopes that could almost dissect a piece of matter down to the ultimate electron, spectroscopes that could shadow the atoms in their ceaseless whirling round a central nucleus, itself whirling, and others whose properties I could only suspect, and the more arresting, the more uncanny because of that.

William Swiff in his way was a poet; years before I had sensed the fact; now he talked in rhythmic prose of his apparatus, his work, his hopes and dreams, until I, too, was lifted up and swept along with him. I recollect that a science fiction magazine lay across a cluttered bench, its cover displayed.

"You remember," he said, "the item I once read you on environment as the cause of age? Well, I am working on that; I am making a little, a very little progress."

His eyes glowed. But that was the extent of his confidences on that occasion.

Once again settled in the old house William Swiff plunged into intensive work and for weeks practically lived in the laboratory. But there were also times he emerged from it to seek me out in the library and give vent to his disappointment. "Everything is going wrong," he would cry. "My mind is incapable of concentration." At such periods I took charge of him, ordered out the car and made him accompany me on long drives into the country. Frequently I drove down to Carmel-By-The-Sea where he had a seaside palace masquerading as a log-cabin and made him tramp the beach, the steep hills and meadows.

"If you don't relax once in a while," I warned him, "you're due for a smash up."

It was in the long walks over the hills that he tried to unbosom himself to me.

"I like to talk to you, Jim, or rather, at you. It stimulates my thinking to do so, and you don't interfere by asking fool questions or chattering yourself."

One day, sitting on the beach, he said: "The things I'm trying to do are within the realm of possibility. If it were possible to enclose the human body in a container, shutting out all hostile environment, youth, life itself, could be indefinitely prolonged."

"But is it possible?" I asked.

"I have already said," he replied, "that anything is; but one must admit that there are difficulties. It is really a problem for future scientists to solve, the materials for doing so today being undiscovered and uninvented. The Machine Men of Ardathia grew from synthetic cells, you remember, and were enclosed in containers while still in the incubators. Mechanical devices were introduced into their bodies before birth; artificial blood generated by the action of light rays on life-giving elements in the air circulated through them but once, upbuilding as it went and carrying off all impurities with it. Having completed its revolution it was dissipated and cast forth by means of another ray."

"But you are quoting from a story," I objected. "Isn't it all rather absurd and far-fetched?"

"No; because experiments with artificial blood undertaken by European scientists, especially in Russia, have opened up wonderful possibilities for future generations in their fight with death. You mustn't forget that the Machine Men of Ardathia are pictured as existing thirty thousand years in the future. Surely, if nothing interferes, science will make what for us will be miraculous progress, not in thirty thousand years but in the next hundred."

"Granted that you are correct," I said, "none the less we shall both be dead and buried then."

"Ah!" he exclaimed, "if one could only live his life in the future, fifty, a hundred, two hundred years from now! Science then would just be reaching its loftiest stature and the age of achievement truly be crowning man. I am before my time. I have the theory of many things, but I am handicapped through the lack of inventions yet to be made, by need of discoveries which only seem around a decade or two's corner. For one man cannot advance very far; only as his fellow-workers fling him their hardly won bits of knowledge can he hope to proceed. But I am dying, wasting away, and may perish before the tools are ready to hand." He made a despairing gesture.

"But it shall not be!" he cried. "The problem is to keep myself young and fit for that future when I can have the wherewithal to work. Yes, that is the problem. To fall asleep; to defy the action of environment which means old age and death; to waken in the glorious future. That is what I seek to accomplish; and I have reason to believe, to hope. . . ."

An Astounding Feat!

CONVERSATIONS such as the above were frequent with us. Since I am writing them down from memory, from inadequate notes made from various times, I cannot claim that they are complete or even that I am quoting William Swiff accurately.

It was one summer's evening in June, a little over a year after his return to Berkeley, that William Swiff summoned me to his laboratory. I found him in the company of a middle-aged man whose face and body bore the stamp of some wasting disease.

"This gentleman's name," said William Swiff, introducing us, "is Michael Brown." That Michael

Brown was relieved at the presence of a third party as commonplace as myself could not be doubted. He clung to my hand.

"I'm pleased to meet you," he said in a husky whisper. William Swiff drew up chairs and bade us be seated.

"I've come about the matter we were discussing," said the man.

William Swiff nodded. "There's a matter of five thousand dollars in it for you if you fill the bill."

"Five thousand . . ." The man licked his lips feverishly. "What would I have to do for it?"

"Submit to an experiment."

"What sort of an experiment?"

"That I can best explain through giving certain illustrations as I talk," said William Swiff.

He stood up and, switching on a brighter light overhead, drew us to where a glass tank stood at one side of the room. This tank was fully enclosed, pipes rimmed with frost running through the sides and center of it. Lying on the bottom of the tank was a cake of very clear ice in which was frozen a small fish.

"To all intents and purposes," said William Swiff conversationally, "that fish is now dead; but—behold."

He adjusted some cocks and switches.

"The electric refrigeration is cut off and warm water flowing into the tank."

We watched the water bubbling out of several vents. In a few minutes that cake of ice began to melt rapidly; soon it was entirely dissolved. The released fish floated lifelessly for perhaps thirty seconds; then to our great surprise gave a sluggish wiggle of its tail and began to swim.

"That," said William Swiff, "was, in its way, a case of suspended animation. Nature does, in freezing the fish, what I am seeking to do with human beings."

"Good Lord! said the man, "you don't want to freeze a fellow in a cake of ice, do you?"

William Swiff laughed. "Of course not! Merely to cause suspended animation in him. The process has to be induced from within the circulatory system, man being a warm-blooded creature. But let me again illustrate."

From a cage set against the wall was taken the apparently dead body of a white rabbit.

"Three days ago," he said, "I injected a preparation into the veins of this animal. Examine it, please."

We did so.

"Anybody would pronounce the rabbit dead," said William Swiff.

"It *is* dead," I answered.

"But it isn't!"

Then as he noticed our incredulous looks: "You don't believe that; you are doubtful. Very well: attend me further."

He laid the body of the animal on a glass-topped cabinet. The cabinet was square and somewhat similar in shape to those used in generating ultra-violet rays. Two large electrodes came somewhat above the glass surface of the cabinet, opposite each other. The body of the rabbit lay between them. William Swiff made a few adjustments and carefully advanced the dial pointer on a graduated face. A deep purring sound came from the machine; the electrodes emitted an intense light which bathed the rabbit's body in a purple haze. A clock-like device marked the time with a huge second hand. At the expiration of one minute a gong rang, the lights automatically switched off, and William Swiff picked up the still lifeless body, but now it was pliable, blood-warm to the touch. "Handle it," he requested; "assure yourselves of the fact."

"But it's still dead," said the man.

Even as he spoke the rabbit twitched, struggled in his hands.

William Swiff regarded us with a slow smile. I on my part looked at the kicking animal incredulously; and no wonder, for the whole performance smacked of black magic, and I muttered something to that effect.

"Don't be idiotic," said William Swiff irritably. "There's nothing mysterious about what you saw; no more than the application of certain laws inherent in chemistry and physics."

He put the rabbit into its cage and motioned us back to our seats.

"Well," he said, "I'd try the experiment on myself only I'd be unable to study my own condition as I would that of another. But there's practically no danger."

"How do you know that?"

"The serum harmed none of the animals I experimented with; they showed no evil after effects."

"But it may not be the same with man!"

"I am confident that it will be. All discoveries having to do with antitoxins were first tested on guinea pigs and rabbits, you know."

But the man was not to be persuaded.

"Think of the money," said William Swiff.

"I've thought of it," said the man. "Good night."

After he had gone William Swiff turned to me with a sigh.

"Damn it," he said, "I never thought he'd hesitate. Both feet in the grave, a family to provide for, and still . . ."

The door re-opened and Michael Brown stood framed in it.

"I wasn't trying to listen," he said huskily, "but I heard what you said, and it's true. I suppose a man shouldn't pass up an opportunity to help his wife and children."

William Swiff went towards him eagerly. "Does that mean that you are willing, that you consent?"

"Yes," said Michael Brown heavily; "yes, I guess it does."

CHAPTER III

Swiff Disappears

IT was on a June evening in the summer of 1935 that William Swiff began his series of experiments with a human being. Those experiments (which I reported for him) were carried on over a period of five months, or until the middle of November. In the first experiment suspended animation was induced for a period of ten days. After a week's rest the patient was again suspended for a similar period. A surprising thing about the experiments was that the subject seemed to gain in health while undergoing them. Michael Brown was suffering from a tubercular condition of throat, ears and lungs.

Whether the absolute rest of lungs, larynx, and other vital organs and muscles when in a state of lifelessness, was responsible for this, or whether the species of ultra-violet ray treatments in conjunction with the injections could claim the credit, I do not know and William would not hazard a statement. The fact remains that on November 13th, after twenty-five days of suspended animation, Michael Brown emerged so restored in health that a prominent clinic of specialists pronounced the throat ulceration healed, the ears dried up, and the lungs well on the road to recovery.

The poor fellow could hardly believe the miracle which had happened him. (Let me say here, in parenthesis, that William Swiff paid Michael Brown much more than the promised five thousand dollars.)

"But you can't keep the results of this experiment to yourself," I said to him. "Think of all the poor devils it might cure."

He looked at me moodily. "I suppose you're right, but I can't be bothered with it, I've other irons in the fire. However, I'll publish a paper in a medical journal, send a report of my findings to the Rockefeller Institute, along with a history of Michael Brown's case, and lay the whole affair before the Department of Health at Washington. Or rather, you will do all those things for me. But mind! I'm not to be interviewed, harassed in any way. Tell them to keep my name quiet, and for the rest do as they please."

The paper William Swiff wrote under a pseudonym never appeared in any American medical journal. Those periodicals consistently ignored our letters, returning the manuscripts without comment. But the article did appear in several leading European scientific journals, notably those of Moscow, Berlin, and Vienna; which perhaps explains why Europe was the first to use a modified form of William Swiff's discovery in successfully combating the white plague.

The Director of Health, Washington, wrote a nice letter, as did the heads of various institutions, acknowledging receipt of information and thanking for contribution to science. There the matter dropped. William Swiff dismissed the affair from his mind and became engrossed in other experiments—or rather, in the one great experiment of which the Michael Brown episode was but a part.

So we went into the rainy season of 1935. I noted that workmen came and went during this time, mechanics, electricians. William Swiff became almost unapproachable. When he walked now, he walked alone, but he seldom went abroad. As for myself I kept the accounts, typed the mass of data he piled on my desk at stated intervals, looked after his mail, and read the papers. I saw with some concern that affairs in China were going from bad to worse, that the Powers were concentrating on Manchuria and the Far Eastern Railroad. I remember the above clearly because it is linked in my mind with an astounding thing, the disappearance of William Swiff!

Let me describe this disappearance. My diary treats of it at great length. Even to this day I have not recovered from the amazement of what I witnessed.

I had become really concerned about William Swiff's health. At breakfast on this particular day he had conducted himself somewhat oddly, several times starting to address me and then breaking off. This was unlike his usual manner. So after lunch (to which he did not come), I made my way to the laboratory, intending to reason him into taking a few days' vacation.

Now it was tacitly understood that I should never enter the laboratory unless specially invited, so I knocked, then opened the door and stood timidly at the entrance for an invitation. I saw William Swiff manipulating the controls of one of his mechanisms. Intense beams of light sprang from huge electrodes into immense reflectors which threw them one to another in brilliant arcs painful to see. I watched the scene, fascinated. Then occurred a thing so incredible, so seemingly impossible, that even now when I know the reason for it, I hesitate to put it on paper.

For William Swiff reached out into space where nothing could be observed and pulled open a door. I saw the reverse side of this door. And more, I glimpsed beyond it a passage, a strange room. Glimpsed, that is all. For before I could observe more, William Swiff drew himself through this doorway by some invisible leverage and swung the door to after him. I stared, I rubbed my eyes in utter astonishment. Believe it or not, William Swiff had clambered through a hole in space and vanished!

The Man in the Doorway

THOUGH what I am telling you happened years ago I shall never forget the feeling of stunned amazement, and yes, even terror, with which I witnessed it. That a man should step through a doorway into a strange passage or room and vanish smacked more of sorcery, of black magic than of modern science. All the old tales I had heard of men trafficking with unseen and devilish powers came back to me. And the thought also occurred that I had seen something beyond the latitude of this world, that William Swiff was dead, and that I had surprised his ghost. God knows what chaotic thoughts rushed through my mind in the first few minutes. Filled with a nameless dread I hastened from the laboratory steps to the house.

"Powell," I asked, "have you seen Mr. Swiff about?"

"A half hour ago he entered the laboratory."

Then it had been William Swiff himself. But this brought back my first instinctive thoughts of sorcery, so allied with superstition is man's brain. Who knew what lurked just beyond the borders of human knowledge?

Such ideas, I say agitated my mind, though I was ashamed of them even at the time. It was while in this disturbed condition I found the note on my desk.

"Dear Jim: In pursuit of an interesting experiment I may be absent a few days. Please do not worry. Above all, meddle with nothing in the laboratory and allow no one else to do so. In my absence watch the tanks marked A and B. Keep them full of water. Every day throw a level teaspoonful of common salt into each. All lights in the laboratory are to be kept burning. Follow instructions plainly written under each reflector. But I may return before any of this is necessary. Until then, Will."

The general tone of this made all my superstitions and fears seem absurd, yet if anything it increased bewilderment, for in nowise was the mystery made clearer. Rack my brains as I would I could not find a rational explanation of what I had seen. But I did what William Swiff requested. The laboratory I kept under lock and key; the estate I endeavored to run as if the master were still present; and so ten years passed.

Yes, ten years! I am not making a mistake; I mean ten years. For day succeeded day, and month, month, and William Swiff did not return. Long before the completion of the first year I had decided in my own mind that he was dead. Trapped in the meshes of his own uncanny experiments, he had perished.

I will not relate in detail the embarrassments of those ten years, of how Powell and I were suspected by the neighbors of having made away with our employer. Fortunately a letter left with his bankers by William Swiff sometime before his disappearance alluded to his possible absence and so exonerated us from blame. But the fight to retain William Swiff's estate intact was by far the hardest thing. The University and two hospitals which under his will were heirs to substantial sums of money sought to have him declared dead and the will probated. This the banks fought to such good purpose that it was not until the winter of 1945 the courts declared William Swiff legally deceased.

On a day of cold blustering rain Powell and I were finishing breakfast. Long ago I had given up treating him merely as a servant. We were finishing breakfast then and were regarding each other with gloomy looks when two middle-aged ladies watching out for the interests of the hospitals arrived. Shortly after them came the official gentlemen who put their seals on things. After glaring at Powell and me, and then at each other, the more harsh-featured of the ladies said she saw no reason for waiting longer for Mr. Grabbe. (Mr. Grabbe was the gentleman representing the University). At this juncture quick steps were heard in the long hallway coming from the rear.

"I believe," said one of the official gentlemen, "that here is Mr. Grabbe now."

The door pushed open. Someone stood framed in the doorway. But it wasn't Mr. Grabbe, it was . . .

We all surged to our feet; we all glared in stupefied amazement; for the man on whom our astonished eyes rested was William Swiff!

Yes, it was William Swiff. There was no doubting his identity. His clothes were torn, his hair matted, and he undoubtedly needed a bath and shave. But for all that he looked scarcely a day older than when I had last seen him. He stared from face to face in great surprise. "May I ask," he demanded, "what's going on here?"

I wrung his hand with genuine emotion. "It means," I said, "that your loving heirs were dividing up the goods."

The official gentlemen pushed forward. "Are we to understand that this is Mr. Swiff, the missing testator?"

"Yes," I said.

"Dear me, this is very irregular, very! No precedent for it; 'pon my soul, none at all! We shall have to go back to the courthouse and arrange . . . ."

They wandered out, muttering. After some expressed doubts as to William Swiff's identity, the ladies went too. William Swiff regarded us with bewildered eyes.

"Powell, Green, I don't understand. Here I've been gone only a short time . . ."

"A short time!" I exclaimed.

"Do you call ten years a short time?" asked Powell.

"Ten years!" cried William Swiff. "Are you mad, or am I? Tell me what you mean."

We told him. "Where have you been," I asked, "that ten years could go by without your knowledge?"

"That is what I wish to explain," he said, "but first let me bathe and change."

When after a two hours' interval William Swiff stretched himself out in an easy chair his manner had regained all its old assurance.

CHAPTER IV

William Swiff Speaks

"TIME," he said, "is the great illusion. Change in space and you. . . . But let me speak of that later. Both you and Powell know that I have been seeking, experimenting, with one objective in view."

We nodded.

"I wanted to skip my own age and live in a future and greater one. And I wanted to reach it still young, in possession of my youth and all my faculties. Do you remember my telling you that old age was caused by the action of environment?"

"Yes."

"Well, it became my consuming ambition to cheat environment. I studied the miracle of suspended animation in Europe. I returned to America and did original research work on my own account. The experiments with Michael Brown showed conclusively that I could induce a species of suspended animation, that I could keep a man for days in an airtight compartment, without ill-effects to his health.

"Ah!" he cried, "do you see what I am driving at? Yes, I thought of suspending my own bodily functions, of sealing myself in an air-tight compartment, much as Francis Flagg had his Machine Men of Ardathia sealed, and so drowse the years away, never aging, or slowly at most, to awake a century hence, young, vital. . . ."

He broke off with a sigh.

That was my objective," he said. "But in science one does not progress in direct fashion. While the investigator is waiting for a first experiment to resolve itself he engages in another. What was intended for a certain purpose becomes utilized for something entirely different. The unexpected happens, and you are off on a new quest. So it was with me. I became intrigued at the possibilities of speed.

"Speed," he cried. "Have you ever thought of the marvelous things inherent in speed. Some people never do. One lives longer traveling at sixty miles an hour in an automobile and grows shorter."

"You mean according to Einstein's reasoning?"

"Yes. But there is another conception of speed which is my own. The idea came to me while watching an airplane propeller. A revolving wheel blurrs at high

rates of speed, it becomes practically invisible, but it is still there, and if you tried to pass through it you would be seriously injured or killed. But what if the revolutions were increased enormously beyond anything possible now? Ah, that was the question which intrigued me! Would not the whirring wheel, relative to us, become not only invisible but non-existent? Would its rate of vibration not be so swift, so far beyond the rate of that of ordinary matter, as to be space in comparison?

"But you see, don't you," he cried, "that this was all speculation? But then everything in science is speculation until you can demonstrate its truth. You realize that?" he insisted.

"Yes," I answered. "I realize it."

"And you know that there is no engine built today capable of driving a wheel fast enough to prove or disprove my theory?"

"There's a limit to what speed can be generated," I said.

"Exactly; a limit imposed by machinery itself. Enormous speeds presuppose enormous friction. No lubricants could prevent bearings from burning out, axles disintegrating. From the beginning I was faced with the seemingly impossible task of whirling a wheel without an axle, of driving it with an energy more powerful than that any known engine could generate."

"An impossible task," I exclaimed.

"No," he replied, "because I did it."

"Yes," he said, noticing our looks of incredulity," I performed the impossible. I shall not weary you with the technical details. Suffice it to say that I solved the problem of axle friction in a very simple manner. Perhaps it is fairer to say that no such problem existed, only it took me quite awhile to figure that out. Don't you see that friction from a revolving wheel could only exist up to a certain point of speed—a point of speed very quickly attained—and that after that, if my theory were correct, the wheel would pass beyond any contact with its axle and could not injure it?

"But there still remained the problem of generating the speed. For awhile that did not nonplus me. Then I thought of light; the speed of light. If I could utilize the energy in light rays for my driving force, much as the energy of rushing rivers is utilized! I tell you I almost despaired.

"Then in one of those moments of almost mystical illumination which come but rarely to even great scientists I glimpsed the truth. Only glimpsed! For it took me months of arduous toil, of intensive thinking, to realize that glimpse of truth, to manifest it in delicate machines, in sensitized plates, vacuum tubes, blended chemicals. For not only must this power be generated, it must be received. The light rays must not glide harmlessly off the paddle-like projections of my wheel; they must persist in their course and hurl them out of thereway, the rays traveling in direct and unswerving lines and at terrible velocities.

"Of course my first experiments were made on a minute scale. I shall not repeat my failures, they were many and depressing, but finally . . .

"Jim," he said, "there came a day when the wheel spun! Yes, the wheel spun. I have no idea at how many revolutions a second, at the speed of light, perhaps, but when I advanced a rod through the space the wheel had occupied it met with no resistance; and when I dared to feel with my hand there was nothing there—nothing."

He fell silent as if even yet overwhelmed by the stupendousness of the thing he related.

"And here," he said, "is something beyond my science to explain. I had hurled the wheel into what passes for us as nothingness, but what power brought it back again? For it came back. Yes," he said, "when I shut off the power it came back. I saw it reappear as a blur, much as I had seen it just before its disappearance, but not that alone. I saw the thing that had come back with it, caught in the paddles, and when I picked it up I held in my hands a long stalk of vegetation, a strange exotic flower, which filled the nostrils with heavy perfume! I stared at the blossom in amazement. It was some minutes before I realized what its presence implied. And then . . .

"Jim!" cried William Swiff leaning forward and bringing his hand down on my knee, "do you understand what it is I am trying to tell you? I had thought only of proving the effects of enormous speed on a revolving wheel but I had done something more amazing, more stupendous than making matter disappear: I had penetrated into another and different plane of existence, a dimension of manifestation beyond our own!"

Into the Wheel!

YOU who read this story can scarcely realize with what feelings of amazement we heard the above statement. Had it been uttered by another than William Swiff we should hardly have believed it. As it was we stared at him incredulously. Could much thinking have disordered his mind?

"No," he said, "as if reading our thoughts, "I'm not crazy."

"But another dimension!" I exclaimed.

"Yes."

"But it sounds . . ."

"Incredible," he finished.

We sat for awhile in silence.

"But how can you be certain, asked Powell at last, "that it was another dimension?"

"Because," answered William Swiff, "I went there."

"Yes," he said, "my discovery thrilled me with its possibilities. If a wheel could enter that unknown world why not a man attached to the wheel? I will not weary you with the full account of my experiments. The animals I whirled through on it came back dead."

"Dead?"

"Yes, dead. An autopsy revealed ruptured blood-vessels in the hearts and brains. The giddy revolutions of the wheel before passing to the strange plane or in returning to this had killed them."

"Then how did you . . ."

"I am coming to that. One day, more as a gesture of mercy towards the guinea pigs, to save them from any possible suffering, I induced suspended animation in them before whirling through. Those animals so treated came back and lived. So it was I found my earlier discovery, designed for a different purpose, of unexpected importance. It is always so with science and invention."

"But how did suspended animation save them from death?"

"By practically doing away with the heart and lung action. The animals could not suffer from suffocation; they could not be sickened with dizziness. Indeed they would be insensible to any of those things and therefore safe from them. Do you understand?"

"A little," I said.

"Filled with elation I built a larger device, a contrivance I called a 'bal-wheel.' It was made of a light but durable metal transparent as glass. In the hollow of the sphere I fitted a chamber and equipped it with various devices for controlling the bal-wheel under any circumstances. In testing out the machine I discovered a curious thing. When generating power with the vacuum tubes and reflecting mirrors an invisible ray is emitted. This ray prevails for five minutes or until precipitation takes place in the chemical tanks. The immediate effect of this ray is to make the bal-wheel invisible."

"Invisible!"

"Yes, invisible. Why this should be so I do not know, but it is. Perhaps the combination of metal and ray has something to do with it. You know the stock reasons advanced by scientists for such a phenomenon. If what I have called the 'primary ray' were invisible to the eye (as it is, being akin to the ultra-violet ray), and if under its bombardment the metal of the bal-wheel allowed free passage to every other ray but the primary, which it reflected, then of course the bal-wheel would not register on the human eye. But this, I say, is merely a theory. On the day of my intended whirl through space I hesitated whether to take you into my confidence. Perhaps you noticed something in my manner?"

"Yes, I did."

"But I thought it better not to worry you. Entering the laboratory I turned on the power, made the final arrangements, and at the appointed time stepped into the invisible chamber."

"I saw you," I said.

"You did?"

"Yes, and quite a shock it gave me."

"I'm sorry. I see now that I should have taken you into my confidence. Well, I stepped into the spherical chamber, made myself secure, injected the suspended animation fluid into my arm, pressed the starting mechanism, and sank into unconsciousness. When I came to . . .

Aeola

"THE first thing," he said, "I was conscious of was music. It was thin and reedy, as if all the reeds of a river bank were vocal and being played through by a sweet and elusive wind. Involuntarily I thought of the Pipes of Pan, I thought of old Greek dryads singing, for this far, the music had in it the timbre of voices. The poignant sweetness of it, rising and falling, so faint and distant as to seem more a suggestion of sound than sound itself.

"Listening, I knew that I had wakened in a strange environment and began to realize the audacity of the thing I had done. Through the transparent walls of the bal-wheel poured a rush of bright sunlight. It was not the sunlight of earth, I knew, for on earth the sun had been shut away by walls of brick and mortar. Besides there was something peculiar about this light, something . . .

"While I remained seated, afraid to move, something flashed by the bal-wheel. It went too rapidly for me to tell what it was. Even as I stared wide-eyed, there was another flash, another, and I glimpsed a shimmering gleam as of silver and gold. Galvanized into action I stood up. At sight of what I saw I stared in wide-mouthed astonishment. For the earth fell away in a gentle incline and over gorgeous, cup-like flowers darted and hovered a myriad of strange creatures on almost invisible wings.

"Glorious beings, they were, their wings all colors of the rainbow, oddly human-like, with bodies the size of five or six year old children's. Several of them hovered over the bal-wheel and stared in at me with curious eyes. They did not seem at all timorous. When I stepped out of my machine they crowded around me in great numbers and the reedy music increased in volume.

" 'Hello, hello,' I said softly, 'who are you?' and was thunderstruck when one of them replied in almost exact imitation of my voice, 'Hello, hello.' That," said William Swiff, "was the beginning of my friendship with Aeola.

"Aeola," he said softly. "The name is sheer music. I called her that because of the harmony breathing from her wings and humming throat. She seemed a veritable living harp—an aeolian harp. From the first she attached herself to me, bringing offerings of flowers, crooning 'Hello, hello.' When I made short, tentative excursions into the neighborhood she went along, seemingly full of an insatiable curiosity about everything I did. If I picked up something to examine she did likewise. And she would run and fetch things for me to look at. I spent a great deal of time making friends with her. I talked to her constantly, quietly, accepting the blossoms she brought, sipping from them in obedience to her pantomimed invitation to do so. The nectar of the flowers was slightly sweet, very refreshing.

"Aeola was like an affectionate child, crawling all over me, hugely interested in the clothes I wore, the ticking watch I drew from my pocket for her edification. This latter contrivance mystified her and her fellows, made them afraid. Aeola was the only one who finally grew familiar enough with it to take it in her hand. She would hold it to her head, shake it, caress it, and I am quite sure thought it alive. She was never tired of viewing the interior of the bal-wheel, prying into this and that, and I had to be on the alert to prevent any damage of delicate apparatus.

"The lightness of Aeola's body amazed me. She was all fluff and dew and sunshine, and almost as transparent as the nectar which proved her sole food. I tried to teach her to talk, but though she was as imitative as a parrot, this proved a hopeless task. Some words she could manage with startling clearness, such as 'hello,' but others she either would or could not pronounce. 'Face,' I would say, touching my own cheeks, 'face.' But she would have nothing to do with face. On the other hand she seized on my name with avidity,

pronouncing it, however, as two distinct words; thus: 'Will Yum.' When I pointed to flowers and endeavored to coax her into giving them a name, she never did.

"Perhaps the Hummingbird People (for this was the name I gave these aerial beings) had no language, unless it was the humming music they made constantly. Aeola did learn to pronounce many simple words but without the least comprehension of them as mediums for thought exchange. Did this imply that she lacked a high order of intelligence? I cannot believe that. After all, what is intelligence, by what yard-stick shall we measure it on another and alien plane? Suffice it to say that Aeola certainly did connect me with my name and kept shouting it at me with adorable grimaces.

CHAPTER V

The Raid!

"IN telling the above I have given little expression to the real surprise and astonishment I felt at all I saw. The first night passed on the alien plane found me afraid and nervous. Lying in the mystical twilight of an unknown world I fought the temptation to return immediately to earth.

"'How do you know,' said an inner voice, 'that the automatic machinery will work?'

"'It worked in the test,' I answered myself.

"'Yes, but what if it fails to do so now? What if someone enters the laboratory in your absence and interferes with the machinery there? What if something breaks down in the bal-wheel and you find yourself marooned in this place, unable to return?'

"I tell you," said William, "lying there I thought of many things, unpleasant things, but I stifled the desire to manipulate the controls, to learn at once if everything were all right. I must have exhausted myself, physically and mentally," he said, "for I slept dreamlessly, and it was day again when I awoke with renewed courage, and full of curiosity to explore my surroundings. Under the guidance of the Hummingbird People I examined the aerial settlement in the branches of great trees surrounding the flowery glade. Their homes were woven on cunningly contrived platforms high above the ground. I spent the second day roaming through this settlement, and it was from a perch in a tall tree that I saw what seemed a rocky tower some several miles away. On the third day I adventured forth to reach this tower. I had no inkling of the dreadful thing that was to befall in my absence. If I had . . . But what is the use to speculate?

"So far, save for a few butterflies and colored insects, I had seen no other living creature beside the Hummingbird People. Perhaps I unconsciously absorbed the feeling of peace and security the latter inspired. They seemed like sinless children living in a perfect Eden. It was without misgiving, without any prophetic warning of coming disaster, that I slipped away from Aeola, slipped away from the flowery, strangely-hued glade into a wilderness just as bizarre. For though the grass and fern and the leaves of trees were green, it was a different green from any I had ever seen on earth. All the colors of our world were here, but subtly blended one with another so as to produce effects beyond or below the range of earthly spectra.

"Can you imagine my emotions as I wandered through this enchanting scene! The going was fairly rough and the distance to the rocky tower much farther than I had judged it. It proved, after all, to be but a rocky projection elevated some hundred feet into the air. From its peak I could see the blurred range of what I took to be distant mountains. The scene was indescribably weird and grand. In seeking to return to the flowery glade I lost my way for several hours. It came over me with uncomfortable conviction that I might wander around in this wilderness for months without ever finding the bal-wheel. I tell you I was in a blue funk. But luck was with me and before night fell I stumbled on the glade once more,—and on tragedy.

"'Good God!' I exclaimed, for among the exotic blooms, lying limp and pitiful on the vividly green grass, were the bodies of a dozen Hummingbird People. They had been slaughtered, killed. And not only butchered but despoiled. For the gauzy and gloriously colored pinions were gone, stripped ruthlessly from the quivering sides as hunters callously pluck plumes from birds of paradise, from living breasts of mother birds, from flaming wings and tails of egrets. In their homes on the swaying branches, I found many of the Hummingbird People crouching together like frightened children and sobbing with terror. Some of them ran to me on little pink feet. In imitation of Aeola they chirped, 'Will Yum, Will Yum,' but nowhere could I find my little friend. She was not among the slain nor the survivors in the nests.

"'Aeola!' I called loudly, 'Aeola!' But there was no reply.

"I tried to question some of the terrified little creatures.

"'Who did this terrible thing! Where is Aeola?'

"They only stared back uncomprehendingly, frightened at my vehemence.

"'She has been carried off,' I said to myself. 'Perhaps she is still alive. If she is alive I will recue her, and if she is dead . . .' My hand gripped the automatic vengefully. I was armed with it and several gas bombs I had brought with me in the bal-wheel.

"It was still an hour before sunset when I found the trail of the killers leading away through the tangled woods and started in swift pursuit. I did not stop to think, to wonder at what terrible creatures the abductors might be. I went swiftly and before darkness fell I came to a road.

"Night in this strange world is never complete darkness. It is at best a deep twilight. The stars overhead loom much brighter than ours and while I was there there was always a gigantic moon. Which direction to take on the road puzzled me. The road was of packed earth, twelve feet or so wide, bordered with woods, and deserted. Fixing the spot in my mind, and after some hesitation, I turned to the left. My watch which I had kept scrupulously wound gave the time as seven-thirty. By it I was walking for five hours (with a few rest intervals between) when I noticed that the woods bordering the road were giving away to cleared fields.

"Other roads branched off from the one I was following. Soon I began to meet more frequently with

what appeared to be houses, though I saw none of the occupants, and realized I was approaching a large center of population, perhaps a city of some size. Then I paused and held counsel with myself.

A Fortunate Accident

"SO far," said William Swiff, "I have told you of this pursuit as if I did not realize the seriousness of it. But I did. Walking through the mysterious night, on a road leading I knew not whither, approaching the habitations of beings of another and utterly strange dimension, I felt more than once like turning back, fleeing to the safety of the bal-wheel. But when I thought of the Hummingbird People wantonly slaughtered, of Aeola alive, perhaps, and facing I knew not what horrible fate, then I cursed myself for my timidity and all my resolution and anger drove me ahead. Perhaps, too, I was filled with curiosity.

"And who would not have been curious? Yet in deliberating with myself I took count of the fact that in entering into a city of unknown beings I was risking my life and liberty. And perhaps Aeola might not have been brought this way at all. Perhaps she might have been the victim of some private party of hunters whom it would be hopeless to find among so many.

"While thinking these thoughts I had taken refuge in the shadow of a big building by the roadside. At this point I heard a noise coming from the building and through what was evidently a window came a flash of light. With beating heart I crept cautiously to this window—it was merely a window-like opening in the wall without glass, and the noise I had heard was its shutter being flung back. I looked in. A flaming torch illuminated the interior of a large room. The room itself was well-furnished. But it was not at the furnishings I looked with starting eyes. 'Good heavens!' I whispered; for in the room, lolling on the couches and chairs or standing about were a number of beings the like of which I had never before seen. In general shape their bodies were human. They stood on two feet. They had two arms and a head. But they were not human beings as we understand the term. Their hands, their faces, were lizard-like. They were what one would expect lizards to look like if lizards should evolve into men.

"I can't describe them any better. They were clothed in loose-fitting yellow tunics that came to the crooked knees and the texture of their skins was dark—dark like that of an Arizona swift's; and in size they were but slightly shorter than myself but more burly and powerful looking. You may imagine with what feelings I regarded them. I had no need to be told who they were. They were the dominant inhabitants of this alien world, beings like to the ones I was pursuing. These lizard-men were talking to one another, not by word of mouth, though they sometimes gave guttural noises, but by means of finger signs, quick movement of the hands. I stared at them, fascinated.

"Now as you know I am an authority on the deaf and dumb method of talking; further than that, I have made an extensive study of the sign language of the American Indians, and of the aborigines of Africa and Australia. All sign languages on earth have a basic meaning in common. If you understand that of the American Indian, say, you can generally decipher the meaning of a sign talk given by an African. Swift though the motions of the lizard-men's hands were, it seemed to me that I could make out certain symbols characteristic of sign languages everywhere. Thrilled by the discovery I leaned forward incautiously and slipped. Now the ledge of the window took me a little below the knees, my hands caught at the window-frame, but slid from their hold into nothingness. With a stifled cry of dismay, unable to prevent myself from doing so, I plunged through the open window and into the lighted room, landing sprawled forward and face down! The unexpected fall dazed me. My chin had hit the hard floor with quite a jolt. The next thing I was conscious of was sitting on a couch with the lizard-men grouped in a semi-circle before me. They were staring at me with wide, lidless eyes. If the sight of them had filled me with a species of fear and wonder, the sight of myself seemed to affect them in a simular manner. There was no mistaking the expressions of alarm on their faces.

"Then I noticed that one of them was pointing from me to something in the shadow of the furthest wall. The gesture was that of comparison. I followed the direction of his pointed finger and made out a carved figure standing on a pedestal. The figure was about two feet high, delicately wrought, and depicted a being in meditative pose, somewhat after the manner of an oriental Buddha. But the amazing thing about this figure was that in face and body it depicted not a lizard-like man, but a human-being such as myself, and instead of being stained a dark hue it was colored a cream-white. I stared at this carved figure, thunderstruck; as much so as the lizard-men, though for a different reason. The resemblance of the statue to myself evidently filled the latter with astonishment and awe. Guttural exclamations rolled from every lip; the finger talk was almost too rapid for my eyes to follow. Then one of the lizard-men stepped towards me and fell on his crooked knees. All the others knelt too. Thrice the leader made obeisance to me, and thrice the others bowed.

"'Good Lord!' I asked myself.' 'What does this mean?'

"I was not left long in doubt. The leader straightened up and began to talk with his fingers. He 'talked,' slowly, now as one might speak in making sonorous utterances. With difficulty I deciphered his words.

"'O Tee-a-tola! Hail, oh hail! to thee, lord of life and death!'

"It came over me in a flash. This statue was their god or a representation of it. Because of my resemblance to the statue they were bowing down to me. I was deity made flesh. I did not stop to ask myself how it happened their god should be fashioned like earthly man. After all, have not human beings carved strange unearthly idols, idols like nothing human, and worshipped them? Perhaps on some other plane, or in some other distant planet, these idols have their counterparts in living beings. But I did not stop to analyze the situation then. I only realized that here was presented a miraculous opportunity for me to exercise power over these people and discover what I wanted to know about the Hummingbird people.

The Truth Comes Out

"NOW I have said before that basically all sign languages are rooted in a few symbols common to all thinking creatures. A little thought will serve to show how true this is. Anger, fear, supplication, hunger, thirst, veneration, these are but a few of the things that reasoning beings, whether in America, Australia, or the Fourth Dimension, would express alike—and these lizard-men were reasoning beings. Therefor sitting majestically as possible upon the couch, I extended my hands and began to 'speak.' Now I had noted the sign for Tee-a-tola, had, in studying the play of the lizard-men's hands, learned somewhat of other gestures. Furthermore I knew that with their proficiency in the art my slow and perhaps stumbling signs would nonetheless be intelligible to them.

" 'It is well that you should kneel,' I said with portentous frown, 'for surely Tee-a-tola is wroth with his children.'

"At this a wailing noise came from the throats of the lizard-men. The hands of the leader signalled in fear: 'O Lord of Ha-vaa, mercy!' and all the hands of the lizard-men supplicated, 'Have mercy, O Lord of Ha-vaa!' And the leader continued: 'What sin has the people, the Ah-wees, committed that the wrath of Tee-a-tola be upon their heads?'

"And I answered: 'In the flowery glade of the forest sacred to my name have the Ah-wees killed and despoiled the beloved of Tee-a-tola, the singing ones with wings of silver and gold; and one they carried off to torture in captivity. The cries of the singing ones rose to me in Ha-vaa and I looked down and saw the blood of their innocence upon the ground. Therefor I came to earth in a ball of glass, for has it not been known that Tee-a-tola would descend from Ha-vaa to rebuke his children, the Ah-wees, if they continued to sin against his divinity?'

This was a random guess of mine, but evidently one which struck home since it aroused no doubt or denial.

" 'Speak, O Tee-a-tola,' signalled the spokesman. 'Let his servants hear the god's will.'

" 'Speak, O Lord of Ha-vaa,' implored the others, 'that thy will may be done.'

"I spoke. 'All the singing ones of the flowery glade and of the forest must not be touched. They are beloved of Tee-a-tola and death and destruction will descend upon them who breaks his commandment. The singing one taken from the forest must be returned to Tee-a-tola; nor will Tee-a-tola smile upon the Ah-wees and return again to Ha-vaa until the singing one be delivered to him.'

" 'Ever have the singing ones, been sacred to Tee-a-tola,' replied the leader. 'Do not the wings of gold and silver adorn his altar in the great temple of Buh-lo (this was evidently the name of their nation)? Do not his priests, La-lor and A-hura, wear the wings of gold and silver in his honor? At the full of Beola (the moon) is a singing one not sacrificed to Tee-a-tola?'

"I shuddered. So the Hummingbird People were slaughtered to provide plumes for priests, they were sacrificed as one of the rites in a superstitious religion. Then the place to seek for Aeola would be in the great temple. I realized that the humble men to whom I addressed myself could aid me little further. It was the priests I must now approach. 'Tee-a-tola would enter his temple and be enthroned on his altar,' I said. 'Let him be borne thither.'

"So it was that as day broke I was carried through crowds of kneeling, superstitious lizard-people into Ga-atha, the city of the Ah-wees.

CHAPTER VI

To the Temple!

"YES, I was carried in state. A sort of carriage drawn by slow, plodding animals similar to oxen but with six feet drew me along. I sat rigidly aloft on the high seat, looking neither to right nor left, but still I could see the people kneeling at the roadside, hear their guttural cries, and decipher their fingers signalling to me to smile upon them.

" 'Bless us, O Lord of Life and Death!'

" 'Have mercy upon us, God of Ha-vaa!'

"The city was quite a populous one, the buildings of stone and wood. The size of some of the buildings surprised me. I saw markets where things were evidently bartered and sold. Everywhere people rushed out of house and byways and fell upon their knees with guttural cries. The men whom I had talked to in the room during the night went ahead of the carriage, bearing high the image I resembled. That is, two of them bore the image which seemed quite heavy and the rest spread wide the sensational tidings of my arrival. I saw their active fingers and hands broadcasting the news.

" 'Make way for Tee-a-tola, Lord of Life and Death!'

" 'Make way for the living God!'

"And one of them was continuously saying with his fingers. 'Woe to the Ah-wees! Woe to the Ah-wees of Ga-atha! Woe, woe; for the anger of Tee-a-tola is upon them.'

"And every now and then those conductors of mine blew upon twisted horns and made the early morning hideous with noise.

"And through this clamor and increasing multitude I drove, outwardly haughty and arrogant and aloof as became a God, but inwardly a prey to anxious thoughts. These people who worshipped and received me without suspicion of fraud were doubtless but the ignorant and superstitious populace. But how would I fare with the priests themselves? Was it to be expected that they would not penetrate my imposture? Filled with foreboding I came to the temple. It stood in a wide plaza, a really magnificent building, or rather a series of buildings made one by connecting passages and covered ways.

"In the center of the mass rose a dark cupola which shone like burnished metal, surrounded with a network of smaller cupolas. So much I could see at a glance, but more could not discern because of the temple's vastness. Only its color seemed that of an exotic flower—a flower whose myriad hues shifted and changed and were never twice the same. You may imagine with what emotions I stared at this masterpiece of architecture. How had the lizard-men with their probable primitive methods of construction and inadequate tools built such a place? Then I recollected

the pyramids of Egypt, the wonderful temples of the Greeks and Romans. What one race could do, another could also accomplish.

"But thought of such things was driven from my head by the need for action. The carriage was at the great doors of the temple and the kneeling worshippers were watching to see what I would do. I rose from my seat and stepped down. The lizard-men who had so far gone ahead of me, now drew to one side, and alone I swept through the wide entrance. As I did so I was startled to have the great doors swing noiselessly to behind me, shutting away the crowd. My fingers convulsively gripped the automatic in my pocket, and for a moment I paused irresolutely, half-blinded by the sudden transition from bright sunlight to the gloom of the interior. Then my eyes accustomed themselves to the half-light. I was in a great auditorium; yet not, as I was to discover later, the auditorium of the temple proper. Ahead of me was a dais on which stood a large image of the god Tee-a-tola, and to one side stood the figures of two men in short scarlet tunics and conical caps. At sight of me these figures fell on their crooked knees. For a moment I hesitated; then summoning all my resolution I swept swiftly forward and stood at the feet of the carven god, my back towards it. With a cry that drew attention to my hands, I demanded:

" 'Where are my servants La-lor and A-hura? Let them approach and listen to the words of the Living God.'

"The two figures advanced and knelt in front of me. That they were the high-priests I did not doubt. One of them was stout and not overly tall; the other was thin. In the shadows from which they advanced I saw more kneeling figures. The lidless eyes of the kneeling priests looked at me with half-fearful curiosity. I did not altogether care for the expression on their faces. The features of the thin one seemed to wear a look of unbelief. Palpably he was doubtful of my divinity. Probably he did not believe in the miracle of gods descending from heaven. Many priests are not faithful believers of their own dogmas. But also he had never seen a living creature like myself before. I felt his lidless eyes probing, studying. His fingers moved rapidly.

" 'Thy servants are here, O Lord of Life and Death. Thy servants harken to the words of Tee-a-tola.'

" 'It is well; for surely am I angry. Why have my children the Ah-wees sinned against me by killing the singing ones in the forest?'

" 'Surely it was in the service of the Lord of Ha-vaa himself they slew. Are not the wings of gold and silver cacred to Tee-a-tola and the insignia of his priests? Surely the sacrifice of a singing one on the great stone at the feet of thy image is acceptable in the eyes of the Lord of Life and Death.'

" 'Nay, the sacrifices must cease. They are an abomination to me. More pleasing the songs of the singing ones in the forest than that their blood should be spilt. The slaughter of them must cease, and the singing one now in the hands of the Ah-wees be delivered unharmed to me. I have spoken.'

I realized I was taking a desperate chance by so exposing what might be a lamentable ignorance of this world. But the situation was desperate.

Into the Pit

"THE two priests bowed humbly and answered:

" 'O Tee-a-tola, we hear! The will of the Living God is our will.'

"And the thin one continued: 'If the Lord of Ha-vaa will accompany his servants, he shall see his singing one.'

"Now indeed I did a foolish thing. Instead of commanding that Aeola be brought to me where I stood, I stepped down from my place and followed the two priests into a dark passage. Instantly I was seized by cold clammy hands and overpowered. My struggling limbs were bound with strong ropes. Ignominiously I was dragged from the dark passage into a small chamber where I confronted the thin, tall priest, no longer kneeling but regarding me with a mocking look. I cursed myself for my carelessness, for having so easily fallen into the trap. The priest gave a guttural grunt or two of derision; his hands signalled:

" 'The priests of Tee-a-tola are no rabble to be easily deceived. From what country thou art we know not, but perchance from the unknown lands across Marah, the great ocean. On those lands there be many strange things; the beast that crawls on seven claws; and creatures like to thyself. That thou art not the Living God is plain to be seen.'

"His lidless eyes surveyed me craftily.

" 'But it is not needful that others should know this. Great will be the faith of the Ah-wees who, with their own eyes, have seen Tee-a-tola; and great will be the power of the priests La-lor and A-hura who heard the last commands of Tee-a-tola and saw him vanish.'

"He gave a series of laughing grunts and I felt the blood run cold in my veins. It was in vain that I sought to move my hands.

" 'As for thee, blasphemer, behold!'

"He pressed on what was evidently a hidden mechanism in the wall. A stone flag raised itself from the floor and revealed a gaping hole, a hole that gave on stagnant blackness. As he dragged me to it I screamed in the vain hope that some lizard-men might hear, some of the men who had accepted me, but there was no response. Down into the stygian darkness the priest hurled my bound body, and even as I fell the flag above me dropped with a dull thud. I hit first on what was evidently a sloping shelf of rock because a portion of the rope that secured me caught on some projection and for a few minutes I hung suspended. To this fact I probably owed my life. Then the rope broke loose and I fell heavily on a damp soft soil some ten feet below.

"Imagine my position. Here I was on another and alien plane, lying bound and helpless at the bottom of a black pit. If terror held me in its grip and if I had to struggle to keep the mad cries from pouring from my lips, was I to be blamed? Around me was impenetrable blackness; the air smelled foul and dank. Then in that blackness, some distance away, grew luminous lights like small discs. I heard the pad of feet, the noise of something crawling. The luminous lights were eyes; they were all around me. I screamed, and at the scream the eyes wavered, went back.

"Madly I strained at the ropes. They seemed looser. The projection from which I had hung had evidently half-severed one of the strands; I could feel it give. I

fought to free my hands, and as I fought the eyes advanced once more. Mad with terror, I summoned superhuman strength and snapped the frayed strand. Only just in time. The luminous eyes were within a foot of my face. Not waiting to release my lower limbs, I plunged the freed hand into a coat-pocket. It came out, not as I had expected with the automatic—that was in a pocket my position made it impossible to reach—but with an electric torch. Yet in this sinister darkness there was nothing I craved to have more than light.

"With a sob of thankfulness I pressed the button and the beam, magnified a thousandfold by the specially designed lens, stabbed through the darkness like a glittering knife. At sight of what I saw my flesh shrank in horror. A hideous monstrosity with the body of a nightmare squid reached out long writhing tentacles of greenish hue. On the end of these tentacles were small discs, the luminous *eyes* I had seen glowing in the darkness. These tentacles writhed in the air, they slid along the damp earth and gave rise to a slithering sound, and the pad, pad of feet I had heard was the curious clopping noise they made as they bent and struck at the ground.

"But the bright glare of the torch seemed to have an intimidating effect on the hideous monster and its tentacles. The latter shrank back from the light. But even as they did so I felt something in the rear take hold of my clothes with a sucking grip. With a stifled cry I managed to turn. There were not one but a dozen of the squid-like monsters surrounding me, reaching out with a hundred tentacles, a hundred luminous discs that were not eyes but hungry, sucking mouths.

"I tore away the remaining bonds and stood on my feet. Before the light the tentacles retreated. I now saw that the horrible things were not animals but plants, a loathsome fungoid growth with roots in this rotting soil, and of a carnivorous nature. With a bound I placed myself beyond reach of them—shuddering to think what my fate would have been had the ropes remained secure—and examined the place into which I had been cast. A glance overhead showed me that it was impossible to escape by the way I had come. Even if I could gain foothold on the sloping shelf of rock I would be unable to reach the trapdoor above; and if by some miracle of stretching I should do so and push up the flag, there were still the priests to reckon with. And undoubtedly the flag was immovable from below. Still I would have made the attempt if it had not been for the fact that ahead of me a passage wound away into darkness. First I would try to escape by means of it. Lighting the way with the torch I crept cautiously along, avoiding the fungoid growths.

The Place of Horror!

"THE passage twisted and turned, evidently following the contours of the immense building above. Suddenly from the black roof overhead something fell upon my head and shoulders in smothering folds, something that was unspeakably slimy to the touch. Then in that underground passage took place a hideous battle. Gasping for breath I tore at the enveloping mass, I rolled on the floor and fought with the desperation of a madman. I could feel the slimy substance rip under my fingers, ooze over them in thick turgid streams. Finally, I literally rended it to pieces; but not until the last shred was demolished did the fighting cease. And all this time I did not see but only felt my implacable assailant. I never knew what it was. And I did not want to know. I was filled with only one overwhelming desire—that of escaping from my dangerous underground prison.

"In the struggle the torch had fallen from my hand. I searched for it as best I could but in vain; so I was forced to continue my way in complete darkness. Can you imagine my desperate situation? The fungoid growths I could avoid because of their luminous discs. But in the darkness other dangers I must chance without any such warning. Still I stumbled on, there seemed nothing else to do, following the rough wall with one hand and holding the automatic in the other. I believe now that I must have wandered from one underground crypt to another through a maze of passages. At last ahead of me I saw a light. Towards it I rushed with a sob of joy, and even as I rushed was frozen into immobility by a hideous scream. Against the pale light appeared the body of a huge beast. This beast was as fantastic and weird as anything seen in a nightmare. Its reddish-pink body was supported on many short feet, after the manner of a centipede, and its long tail was spiked with horny projections. The head of this monster was long and narrow, with something reptilian in its mold.

"'Gr-r-ra-ah!' screamed the horror.

"Its long spiked tail lashed the floor in fury, its mouth slavered with rage. Then with another nerve-racking scream the beast launched itself straight at my throat. But with an agility born of fear I leapt aside; and as the body hurtled by poured into it a rain of bullets. The lashing tail missed me but by inches. With a hideous roar, the creature turned and charged again, but not with its first impetus. Again I avoided its rush and fired.

"Down crashed the monster in a writhing heap, unable to rise. I did not wait to see it die; I was afraid another of its kind might appear on the scene. Dodging past the squalling creature I made for the light ahead and so emerged into a chamber illuminated by daylight pouring through a jagged hole set high up in one of the walls.

"To clamber up to this opening was not a difficult feat, the wall being rough, and many fallen pieces of masonry leading to it in a steeply slanting pile. The hole had really been caused by a part of the old foundation caving in, and the beast I had slain had doubtless come into the vaults by means of it. Clambering through the opening I found myself in what was evidently an old sunken garden, over-grown with tall grass and tangled shrubs. This small and deserted garden was entirely surrounded by the high walls of the temple.

"From a half-choked fountain which trickled a stream of water I quenched a raging thirst, renewing my strength with a few of the tasteless but highly concentrated food tablets I carried in my pockets. Then greatly refreshed I searched for a way out of the place. That there was a way I felt certain, a way by which the priests had introduced the many-legged beast into the vaults. Not content with hurling me bound and helpless into the crypt, an easy prey for the noisome

fungoid growths, they had sent in the hideous monster to make sure of my end. Save for the accident of catching on the piece of sharp rock, their murderous design would have succeeded.

"I wondered how many of the lizard-men, enemies of the priests, had been hurled to such a horrible fate. True, I had stumbled over no bones as evidence there had been any, but perhaps the terrible fungoid growths, the many-legged beast, devoured the bodies, bones and all. It was not a pleasant thought.

"Finally behind a mass of rank growths I discovered a small door. It opened creakingly and with much protest but still it opened. A low and fairly broad passage wound into the bowels of the building and led to a flight of stone steps. Up these steps I mounted. Another passage ran away into gloom and a small circular staircase went still higher. After some hesitation I ascended the staircase which terminated in a small curiously shaped room. The room seemed full of crude mechanisms, pulleys and levers. In this room I became aware of confused noise, the noise of many people moving and breathing. Then even as I stood in the center of the chamber, taking stock of my surroundings, from an opening on the left appeared the figure of a lizard-man in the scarlet tunic and conical hat of a priest. It was the shorter of the two priests whose cunning had almost led to my death in the vaults.

CHAPTER VII

The Sacrifice

"At sight of me he stared, transfixed with astonishment, then with a grunt of menace hurled himself forward. How I had escaped death might evidently be beyond him, but it was plain to be seen that he suffered from no superstitious fears. Down I went under the impact of his body, taken by surprise, and in a thrice his clammy, lizard-like paws had me by the throat and were choking the breath from my lungs. He was strong, much stronger than I believed possible, and save for the fact that I held the automatic in a free hand he would have finished me. Now the automatic was unloaded; I had emptied my last bullet into the body of the many-legged beast, but using it as a club I struck blindly at the grotesque head of the priest.

"The blows dazed him. I felt his scaly fingers relax. Half dead from lack of oxygen I broke his grip, rolled clear, and was on my feet again, drawing in great sobbing lungfuls of air. The priest too staggered to his crooked legs seemingly as full of fight as ever. Again he charged me. We were fighting in confined quarters. I met him with a stiff jolt to the face, having dropped the revolver in getting up. The blow shook him. I knew better than to risk feeling his fingers again. At close quarters he would finish me. But boxing was not his forte. I followed up the jolt to the face with a straight left in the ribs. I side-stepped and landed a swing to the chin. Down he went with a crash. Yet he was up again nimbly enough.

"'God,' I thought, 'is he made of iron?' The blows from the revolver alone should have rendered him unconscious. The swing to the chin would have knocked out the average man. But the lizard-man seemed to rise up faster than ever. Mad with rage he hurled himself at me with clutching hands. In vain I showered blows on his face, his head. Back I went, back. I tried to sidestep again and almost fell over a projecting lever. I threw out a hand to save myself and it fastened on a length of wood that came away in my grasp. With a grunt of triumph the priest wheeled and closed with me. But at that moment I whirled up the length of wood and brought it down, down on his hairless head. Under that terrific blow he dropped and lay still. I stared at him, hardly believing the battle terminated. Dark purplish liquid oozed from the crushed skull and the bruised face. There could be no doubt: the priest was dead.

"I leaned against the wall breathing heavily, feeling my sore and lacerated throat. Otherwise I was uninjured. Again I became conscious of the confused noise of many people. Immediately alert to new danger I stole to the opening through which the dead priest had come and peered out. Beyond was a space scarcely large enough for a man to occupy. The noise now increased. Cautiously gripping the piece of wood I stepped into this space and looked out. At sight of what I saw I gave a gasp of amazement, for I found myself staring down upon an altar, upon a vast auditorium full of Ah-wees, the lizard-men!

"Yes," said William Swiff, "I was looking down into the great auditorium of the temple, and it was some moments before I realized that I was standing in the left ear of a gigantic statue of the god, Tee-a-tola. The vast face and mighty limbs of the god dominated the scene on which I gazed. Unknowingly I had entered a chamber in the interior of the god's head. That the chamber was utilized for the working of miracles by the god, the existence of the levers and pulleys, and lastly the presence of the priest, conclusively proved. But all thought of such things was driven from my head by the scene on which I gazed.

"Below me was the altar—the altar that lay at Tee-a-tola's feet—and crowding that altar was an array of priests in scarlet tunics. But it was not at them I glared in horror. No, it was at the slender child-like body which lay prostrate on the block of black stone. Four priests held extended the wings of gold and silver and pinioned the delicate hands and feets. I saw the piteous face turned upward, heard the frightened humming pouring from the little throat. With a stifled cry I leaned forward. There could be no mistaking the situation. The lizard-men had gathered together to worship their god; the priests were engaged in carrying out the ritual of their religion; Aeola was about to be offered up as a sacrifice to Tee-a-tola!

"If the distance hadn't been so great I would have leaped down on the altar. But that was impossible. I saw the tall thin high-priest, fellow to the one I had slain, addressing the audience. He was clad now in long sweeping robes of crimson. On either shoulder was affixed the glorious gold and silver wings of a singing one, insignia of his rank. From my position I could see the play of his hands.

"'For this is the message given you by Tee-a-tola through the medium of his servant A-hura. Thus spoke the Living God before he vanished: I am wroth with

my children, the Ah-wees. Too long have they neglected to pay meet tribute to my priests. Their hearts have turned away from Tee-a-tola. Let them, therefore, approach the altar, the altar in the great temple before my image, and make sacrifice as in the old days of a singing one, not only in the full of Bel-bel as is now the custom, but on every tenth day of grace. For the sacrifice of a singing one is pleasing in my sight,' said Tee-a-tola, 'and sacred unto me. Let the Ah-wees hear and obey the commands of the Living God which I came from Ha-vaa to give unto my high-priests.'

"'We hear and obey, O Lord of Life and Death,' answered the hands of the audience.

"Then A-hura turned from the people, the Ah-wees, with a magnificent sweep of his crimson robes, and standing at the foot of the sacrifice stone implored the gods with his signs.

"'O Tee-a-tola, Lord of Ha-vaa, thou who at the moment of acceptance hath always entered into the statue raised as symbol to thee, who deigned to reveal thyself to simple people that thy omnipotence might no longer be doubted, enter now into the holy image of thyself and give us a sign that this sacrifice is pleasing in thy sight.'

The Warning!

"AS he ceased his imploring, a priest approached and held out a great burnished knife, which A-hura seized with one hand and held aloft above the exposed bosom of the gentle Aeola. His wide lidless eyes were cast upward upon the face of the god. I knew for what he waited. His accomplice at this point should have pulled some hidden mechanism to achieve the sign of approval he desired. But his accomplice was dead; and, in a way the high-priest dreamed not of, Tee-a-tola had entered into the symbol of himself. But to what purpose?

"To cry out and expose myself to the worshippers in the auditorium would be futile. Against the vastness of the god's face my own body would be dwarfed to pigmy proportions. Besides the high-priest might take my gesture as sufficient sign and plunge the cruel knife into the helpless victim's breast. Yet what else could I do? The automatic was unloaded. To throw the piece of board at A-hura's head was useless; to search for a means of reaching the altar from where I was would doubtless bring me too late to Aeola's rescue. Even if a sign were withheld the high-priest would probably sacrifice the singing one. Desperately I cast about for a weapon; then I remembered them. In my pocket were several gas-bombs. In the excitement of all the perils I had undergone their existence had been forgotten. I can only explain the fact by pointing out that I am not accustomed to using bombs. Be that as it may, I now drew them from the inner pocket of my coat. Not much larger than good-sized walnuts, they were filled with a highly concentrated sleeping gas, an instant anaesthetic I had made myself.

"Still stood the high-priest staring with lidless eyes at the statue. Withdrawing the pins that kept the containers hermetically sealed, I lifted my arm and hurled them, hurled them out and downward. They struck the floor at his feet and the inner springs threw open the shells and released the gas which, on mingling with air, exploded in tiny spurts and threw up columns of luminous smoke. Back staggered the high-priest A-hura clutching at his throat, the burnished knife falling to the altar floor with a ringing sound. The priests holding Aeola also staggered back. As if struck by lightning they fell. A-hura collapsed in an inanimate heap. Not a priest escaped.

"Then from the auditorium I heard a bedlam of terrified grunts. Before the eyes of the worshippers Tee-a-tola had struck his priests and high-priest with instant death. So it must have seemed to the lizard-men. They fled before the drifting luminous smoke and the wrath of their deity. Turning I re-entered the chamber in the god's head, stepped over the body of La-lor with a shudder, and descended the stairs. It was some time before I could discover a way to the altar. When I did the luminous smoke had dissipated, the gas dissolved. Picking up the limp body of Aeola, also unconscious under the action of the sleeping gas, I followed in the wake of the fleeing lizard-men and so came to the temple doors. In the street beyond a great crowd of the Ah-wees fell on their knees at sight of me and held out supplicating hands.

"'Mercy, O Tee-a-tola, mercy!'

"'Mercy on us, O Lord of Life and Death!'

"Laying Aeola at my feet I motioned for silence.

"'Listen, O children of the Ah-wees, and heed my words. Have I not said that the singing ones with wings of gold and silver must not be harmed? They are sacred to Tee-a-tola. You shall not hunt them, strip from them their wings, nor sacrifice them on my altars. Because the priests hardened their hearts and would not listen to my commandments, I have stricken them with death. Yet is it in my heart to be merciful. Therefor I shall raise them to life again. But La-lor, the high-priest, I will not raise to life. Him I have slain as a sign and a warning. Do the children of the Ah-wees hear?'

"The kneeling lizard-men answered with swift signs: 'We hear, O Lord of Ha-vaa.'

"'Then let the carriage be brought that I came hither in, so that I may return to the flowery glade with my singing one.'

"The carriage was brought. Through the streets and out into the country roads I drove, lizard-men running ahead of me crying:

"'Make way for Tee-a-tola!'

"'Make way for the Living God!'

"So I came once more to the trail in the forest. Here I dismissed the carriage. To the kneeling Ah-wees I signalled: 'Tee-a-tola goes away to his singing ones but he shall come again.'

"Then carrying Aeola I plunged into the woods. Far off I could hear the sweet singing of the Hummingbird People, the ready music of their throats rising and falling. Approaching the flowery glade I again saw the flash of gold and silver wings hovering above exotic blooms. The bal-wheel I found undisturbed. Aeola returned to consciousness as I knew she would.

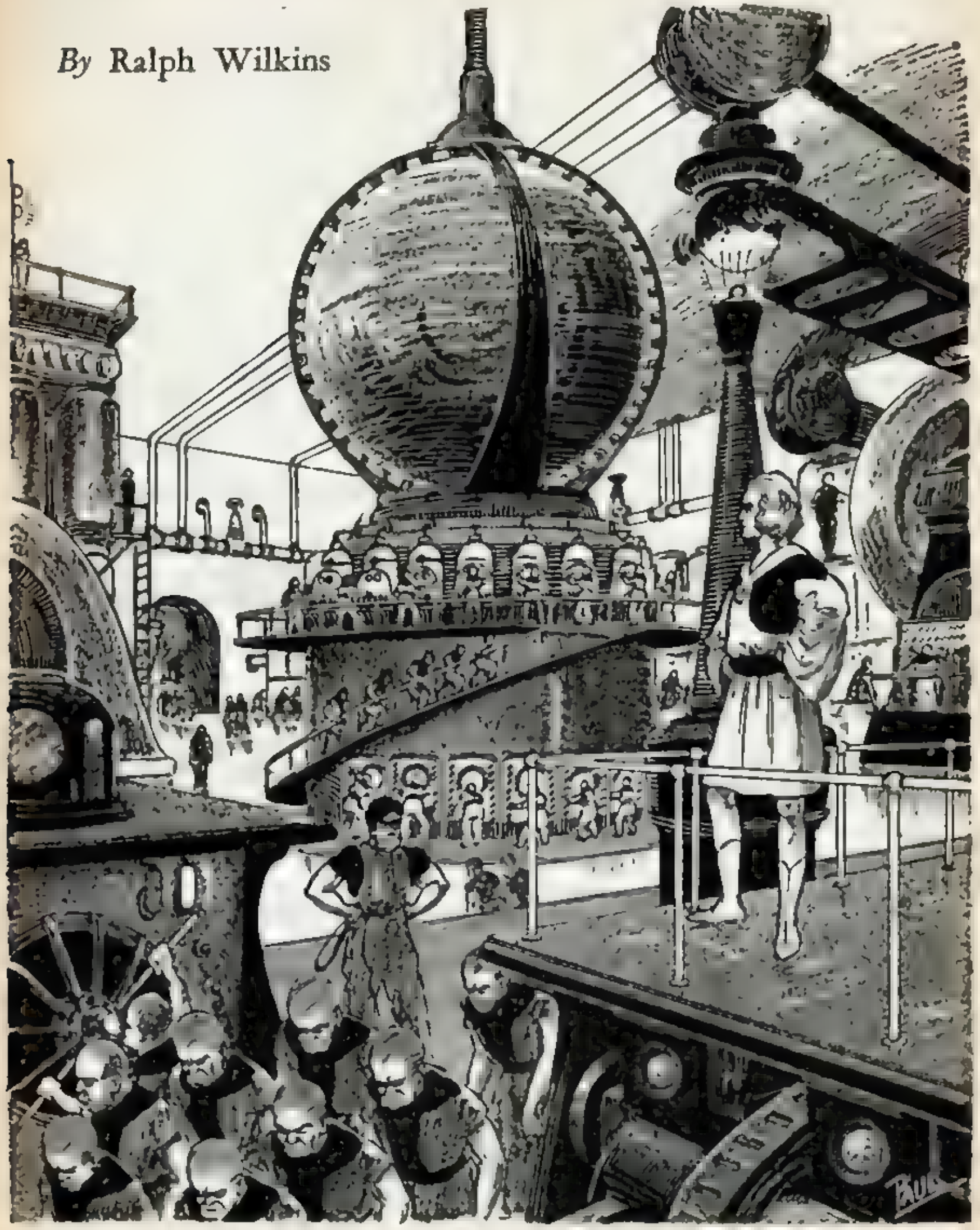
"'Will Yum,' she chirped delightedly. 'Will Yum.'

"How much of her perilous adventure did she re-

(*Concluded on page* 464)

The Empire in the Sky

By Ralph Wilkins



(Illustration by Paul)

They rose like cattle—going to their tasks at the great machines; and at evening they came home, tired like cattle.

IT is more than five years, now, since Athelstan Speare told me the story of the Cities of Atlantis. On the stormy evening that he did so, I thought that the story must be true. He told it with such a convincing simplicity that I could not do otherwise than believe him.

But the next morning, in the cold grey light of a rainy dawn, the story seemed robbed of its reality. As I lay in bed and recalled the things he had told me, they seemed but the bizarre fragments of a wild dream.

Perhaps it was because the tale was stripped of the romantic halo that his voice had given it, denuded of the mysterious atmosphere that the rain-swept conservatory had thrown about us. Perhaps it was the absence of Dhera whose exotic presence there the night before had made the wonderful tale seem natural, since it concerned her.

In the soft brightness of the little dinner table, the tale had seemed credible for we had seemed to exist in a small bright little world of our own . . . cut off from everyday realities. But the next morning I saw it all as frankly impossible.

"Speare was romancing!" I said, "Speare of all people! I should never have expected it of him!"

Afterwards, as I sat up in bed and ate a leisurely breakfast, arranging my notes between bites, I found that I could not escape a flavor of intense reality that emanated from my data. The impossible tale found support at unexpected points, and in irrefutable ways. On my table at the other end of the room was a long thin sword of clean bright metal, far stronger than any steel on earth, and bearing a golden hilt set with priceless gems. Never in any armory on earth had I seen such a weapon. A sword it was, but as quaint and as curious as if it had been brought to earth from strange and bizarre planet. Beside the sword stood a clock, yet like no clock that Asia, Europe, Africa, Australia, or America has ever seen. A small blue crystal ball slowly revolved, like a miniature firmament of heaven. Constellations marked the hours, and a planet swung about this miniature sky to count the passing minutes. There was also a pile of golden dishes carved in a style and manner like nothing I have seen in any museum on earth.

"Take these," he had said. "They are tangible proofs of my story."

How could I account for them in any other way? And how could I account for the soft-eyed goddess who had smiled across the table, and whom Speare had introduced as his wife. Her glinting hair was arranged in a coiffure such as I had never seen before, and there was about her an indescribable aura of mingled familiarity and strangeness. In the glare of the candles her full beauty had been revealed. I had seen an amber-skinned blonde, with large brown irises, and eyebrows darker than the tresses; one of those who appear to us now and then in some exotic dream. All her lovely features combined to an effect intensely strange, distant, remote. . . . She had been vaguely suggestive of things I had known or thought of. If Speare's story did not explain her, whence was she come?

RALPH W. WILKINS

That night the eager questions had tumbled from my lips, and Speare had answered them fully, seeming glad to find someone to whom he could tell his story.

"You won't believe it," he kept insisting. "If it were not for Dhera there, I should doubt it myself."

I have said that the next morning I doubted him. Yes, but later I believed again. . . .

* * * * *

He had been working on high altitude flying in the southern Atlantic when his adventure began. One moment he was forcing the plane up—up, into the rarefied regions of the outer atmosphere, when suddenly he struck what can only be described as a whirlpool of the air, except that the pull was up, not down. It became unnecessary to force the plane up. A titanic force gripped it and sucked it heavenward. Up, up, round and round like a cork in a whirlpool they swung, he and his plane. He lost all control, sweeping ever skyward. It may have been moments, or it may have been years that the maelstrom pulled him forward. He will never know. Time for that period changed its meaning for him.

Then as suddenly as he had begun his upward swing, it ceased. His altimeter wrapped its needle about itself several times. He was more than ten miles high! Well it was for him that he had electric stoves which functioned automatically, or he would have frozen stiff. And well it was too, that his tanks maintained a steady flow of oxygen into his air-tight cockpit, or he would have died horribly strangled.

As it was, he was ter-

HERE is a truly different story of future aviation, the kind that will delight the hearts of future aviation lovers. It is well established theory that some of the ancient races—such as those who inhabited Atlantis—possessed a tremendous amount of scientific knowledge of things of which we are ignorant. If the catastrophe that engulfed that unfortunate nation had not occurred, perhaps we today might be in possession of secrets which would change our entire civilization! In this thrilling story of mystery and intrigue we get a picture of a nation which might have existed and for all we know, might still exist. This nation, of course, is Atlantis, about which much has been written. But Mr. Wilkins gives us a new picture of its mysterious people, and brings his story right up to the present.

ribly scared, feeling certain that he would never regain the lower altitudes safely. His eyes, wildly searching for safety, noted below him what seemed to be a strange cube-shaped cloud. As he sank lower, he felt sure that his mind had given way under the strain that he had endured. For the shape below seemed to be no cloud, but rather some great cubic mass of matter, floating in the air, ten miles above the sea! His mind could not grasp the situation, but he said to himself, "If it's a mirage I can only pass through it, and if it's real, I'll be somewhere, anyway." And so saying, he essayed to land.

When it was too late, he noticed that the surface below him was not flat, but ran, from each side, in a sharp slope toward the center of the thing below him. He felt his plane land on a solid foundation, and then begin to roll rapidly down the incline. At the foot of the incline a wall rose, and it seemed to him that there was no escape from a crash. But at a distance of a hundred feet the solid wall opened, and Speare saw that he was entering an automatic door, designed to open for airplanes which landed on that "roof." Then, he thought, he fainted.

A Startling Truth!

WHEN he came to, he found himself in a great room, in which three were unmistakably a large number of airplanes. And though they were not like any planes he had ever seen, they were certainly ships of the air. Just as a Viking hull, a Roman trireme, a ship of the Armada and a modern steamer, though utterly dissimilar are yet plainly of the same family, so the planes which Speare now saw, though utterly unlike anything he had ever seen, were yet unmistakably related to his own monoplane. He saw at once that he had entered the landing room of the mysterious air island he had discovered. And it was this that had saved him. For if he had been forced to land outside, his body would have been changed to a chunk of frozen flesh in no time, so cold was it in those upper reaches of space.

Inside, however, it was warm enough. The temperature must have been sixty or more in the great room in which he was resting. Light came from holes in the roof, covered with prismatic glass.

Speare descended from his machine. There was no bustle of activity such as he might have expected. Only a dull silence and a lonesome echo fell upon his ears. He looked around; he felt creepy. With a start he perceived a frightful face peering at him through the dusk of the room. He moved steadily toward it, his hair standing on end. Then he laughed, grimly. The face was that of a skeleton, held up against a plane, by a sword stuck through its ribs.

Athelstan Speare was a brave man, but who cares to be received by a committée of skeletons; for as his eyes became used to the room he saw hundreds of them. It looked as if a battle or a massacre had occurred there. Everywhere were skeletons and fallen weapons. Suddenly there was a rapid movement in a far corner of the room. With a yell of terror Speare bounded back to the cockpit of his plane, and unlimbered the machine gun which was part of his equipment. Nothing further occurred, and gradually feeling secure and laughing at his former fears, Speare fell asleep.

When he awoke, it was daylight, and his watch told him that he had slept the clock around. He cautiously left his plane, intending to make an examination of the machine, preparatory to getting away from the ghostly place into which he had come. But he found his propeller smashed, undoubtedly as he had gone through the door. His hope of escape gone, he realized that whether he wanted to or not, he must stay upon the mysterious island of the air.

Speare had always flown prepared for becoming stranded in some desert place, though he never had conceived of anything so bizarre as what had occurred to him. Hence he was well supplied with food and necessary arms, ammunition, and implements of all kinds. He had electric stoves for warmth and cooking (so long as his current lasted) and electric light as well (for the same period of time). After that . . . well, he would take care of "after that" when it occurred. Meanwhile, he was a well equipped Robinson Crusoe.

He began, bit by bit, to explore the place, and to get some conception of the tremendous size of his new abode. From outside he had seen the place as a great cube. Now he saw that the cube was divided within in many thousands of chambers great and small. Estimating the number of stories or floors from the height of the chambers in which he had already been, he decided that there might be fifty stories. He later found that his guess was only a quarter large enough.

I well remember how he blurted out to me his discovery. He hesitated a long moment. I could see him trying to choose a few of the thousand wonderful experiences that had happened to him in order that I might get some idea of his adventures, and at the same time believe him. Finally he blurted, "The long and short of it is:— I had landed upon a city that was 'floating' ten miles above the Atlantic Ocean, a city far more ancient than Troy, a city that was old, when Rome was young. It was one of a number of such floating cities on which the population of lost Atlantis escaped from the cataclysm which destroyed their continent."

It was characteristic of Speare that he should make a startling, incredible statement like that in such a manner of fact way. The thing had happened to him, that was all; and having happened, he found no great cause for wonderment. A thing which had actually occurred could not be incredible, hence, hence, he stated it baldly, as he would have stated any other fact.

That he had discovered the abode of the survivors of the legendary continent of Atlantis seemed to mean no more to him than any ordinary adventure.

But through his words, I glimpsed as through a half open door the things he had seen there. Vivid colors, almost barbaric splendor, strange creations of their science. To see these things at first hand! To learn the true story of Atlantis from the lips of the very descendants of that ill-starred continent! To learn their arts, their science . . . ! All this had been Speare's lot, and all he said was, "The long and short of it is, I had landed among the descendants of lost Atlantis!"

Such things happened to men like Speare . . . why couldn't they have happened to me!

I suppose, though, that's what all ordinary people say when confronted with the exploits of the unusual.

A Dead City

HAVING found that escape was out of the question, Speare began to explore his surroundings. Armed with a revolver and a long knife, and using his plane as a base of operation, he made it his daily business to learn more and more of the great labyrinth into which he had been drawn. Everywhere he went he found wonders. Great rooms, and each room seemed to have a definite place in a scheme of things that embraced the whole city. But he found no bustling business, no active groups, no workers, thinkers, or dreamers in these rooms. Only the skeleton forms which he found everywhere told him that once a people had lived vividly there.

Wherever he lit a fire or flashed his torch in these echoing rooms, the walls and ceilings sprang to life in a brilliant riot of color. Some rooms were one mass of solid red, others solid blue, some a shifting pattern of kaleidoscopic geometric design.

I remember that for a long time I became lost to the world as I listened to Speare's narrative. Then a thought struck me, and I said.

"But, Speare, didn't you find it cold up there?"

"You are thinking," he replied, "of a flat island with spires and trees and great buildings, aren't you? It isn't like that. Imagine, if you can, a great hollow cubical block of rock, two miles square, floating in space, and you will have a picture of our City from the outside. This was necessary, you see, in order that the people might have heat and air. In a sense, the city was more like a titanic castle. Though at one time it must have been inhabited by well over a million people."

"But were all of the people gone," I asked?

"Most of them, but some were still there, and I shall tell you about how I met them."

* * * * *

Having received no great scare or even intimation of danger, Speare began to roam farther afield. Wherever he went he found the skeletons, and formed many a theory as to the cause which had been the death of so many souls. Much of what Speare saw, he did not understand. The words, letters, and inscriptions were utterly new to him, and even when he saw an object which he could place definitely, as for instance a chair, or table, or some other necessity of every day life, there was a strangeness about it which made it altogether new and different. He found that it was no further than about an hour's walk to any side of the floating city from any other.

The "outside" chambers interested him particularly. Evidently they had been the habitation of the elite of this strange place, the lucky few whose sphere was in the sun. The outer walls were of some heavy metal that was as transparent as glass, and through which the sunlight poured in electric, life-exciting rays. Speare had lived so long in the damp, darkened passages of the labyrinth, that the sunlight went to his blood like wine. He uttered a shout of delight, and bathed himself in the warm rays all about him.

But one day as he dozed, in a room of splendor, he suddenly awoke alert, a sixth sense telling him that he was not alone. Quietly he peered through nearly closed eyelids, and saw staring at him in frightened wonder, a lovely girl.

She was dressed in the simple but beautiful, almost classic costume that he had seen in the pictures and decorations that abounded in the city, and her hair was arranged in three crowns of curls, and bound by ribbons of deep-hued purple. No stockings hid the strong lithe beauty of her legs; only a pair of light sandals shod her feet. Whether this meeting would have ended in comedy or tragedy, it is impossible to tell, for the girl was plainly armed, and Speare feared that a sudden move on his part would cause her to attack him with some strange and powerful weapon. On the other hand, he grinned inwardly at his being taken unawares and racked his head for his next move.

The question was solved for him by an outside agency. A hairy, uncouth figure seized the girl and dragged her backwards. He had appeared suddenly through the door. With a shout, Speare seized his revolver and with the recklessness which characterized him, he fired. He might thus have killed the girl, so hazardous was the shooting, but his luck held, and he drilled a hole in the brutal enraged man who had come so suddenly upon the scene.

They were not alone, however. Many others had appeared, and Speare thought the game was up. But the girl beside him was no shrinking violet. This was her world, and she knew how to live in it. She pointed a weapon at her assailants, and with terrific explosions they flew into a million fragments, one after the other. It was over in a few moments, the enemy who were not destroyed having run away.

Then his lovely comrade turned to him and said, "Thank you." Not in words, nor in gestures, but rather as if an *idea* had been sent from her mind to his. He received a complete impression of gratitude as clearly as if she had spoken in so many words. In some way she knew how to make telepathy her servant.

"Who are you?" she asked in her own way, the thought entering his mind and clothing itself in his own words with machine like precision.

The Playground of the Nobles

HE told her as best he could, and she smiled her comprehension.

"Ah, you flew from the earth, and so came here! Years ago, before the Catastrophe, my father said that one day the men on earth would master the secret of flying and so end our isolation. And now that one of you has come, he finds this!" She threw out her hand to indicate the rotting furniture, the skeletons and the dead men they had fought so short a while before.

"Come with me," she said. "I come here often and wish I could live in these sunlit rooms. But I cannot afford to be so far away from the water. It is dangerous to go far. It has been lonely for me here since father died. It will be good to have a friend and a companion."

They walked down great flights of stairs. Near the stairs were two great shafts. Almost before the question concerning them had reached his mind, the girl had answered it. He received a vivid mental picture of great elevators moving up and down these shafts, bearing myriads on their busy way.

They left the bright sunlit rooms where they had met

and descended deep into the entrails of the ancient city. A little wand the girl carried glowed brightly at her touch, and emitted a remarkably brilliant light. Speare saw titanic machines, silent and rusting now, which must once have filled this room with a brazen clangor. Once scores of sweating forms must have served these metal monsters, to meet the needs of the city. Here his fair conductor told him to be careful and quiet. To his amazement he saw soil and growing things at one corner of the floor which was brilliantly lighted.

The light was a brilliant violet, and in response to his muttered question the girl told him that this was one of the floors which had been dedicated to the growing of foodstuffs in days gone by. The light he saw was artificial sunlight.

In days gone by the whole room, two miles square, had blazed with light. Now, the survivors were using only a small portion of the space to grow foodstuffs. Her own garden, she said, was up in the sun rooms where she had met him. There she had laboriously carried soil, and there she grew what she needed to supply her own simple wants. Speare gathered that the other inhabitants of the city were hostile to her.

On the next floor, the torch of the girl revealed a great lake of water, two miles square, covering the entire floor. It was as dark as the Styx, and altogether the gloomiest place Speare had ever seen.

"The reservoir in the old days," explained the girl. And as the thought waves amplified the idea, Speare saw in his mind's eye the designer of this wonder city, planning a reservoir to cover every need and to keep the city well supplied during a long period when water might be unobtainable.

"You swim?" asked the girl. And when he answered in the affirmative she expressed delight.

"I feared I might have to take you. I alone swim, of all the survivors here in this city."

Speare asked her why. In the reply he saw a multitude of crushed slaves living in the bowels of that great city, never seeing the light of the sun, and having hardly enough water to drink or to keep themselves clean. And then there flashed into his mind pictures of the rulers swimming in great pools in the sun rooms. The men he had seen and fought with were the slaves, he gathered, and the girl had belonged to the noble class. No wonder the slaves did not know how to swim! Where, he wondered, were the other nobles and their consorts.

The girl did not answer this, being busy. With the utmost unconcern she began disrobing for the plunge into the water.

"We must swim to my home," she said. "It is the only place I can find safety."

As if to mock her words, a great tentacle suddenly whipped through the air and enveloped her. With a shout, Speare raised the sword he had picked up and was carrying, and slashed the loathsome thing which had shot from the darkness. There was a surprised infernal scream from the gloom behind. As the tentacle dropped from her, the girl switched on her light, and Speare saw a loathsome beast with a bloated body, devil's head, and great whirling tentacles go scurrying off into the gloom.

"Kept for the punishment of slaves and prisoners," she shuddered in explanation.

The girl put her weapons and light into a sort of knapsack which she threw over her shoulders and strapped on. Speare belted his holster about his waist and thrust the sword under the belt. The girl was already swimming with a graceful, easy stroke toward the center of the lake, when Speare, throwing a regretful glance at his clothes on the shore, plunged in after her.

In the center of the lake, Speare now discerned a soft dim light.

"Swim for that . . . the light you see there! That is my home."

A Snug Retreat

THEY swam for a mile, and climbed out upon a good-sized artificial island of solid rock, about two hundred feet square. All about the surface of the island were great machines. Later Speare learned that this was the pumping station that in former times had sent the water to all parts of the great city. In the center of the island a flight of steps led down into a space hollowed out in the old days to increase the storage space. This was the girl's home.

The island rose well above the level of the water, being equipped in fact with great stairs, leading up from the water's edge. The space dug out of the rock comprised several floors, and as the ones below water level were not used for living quarters, the retreat was snug and dry.

Speare rather expected to find friends of the girl living here, but there was no one but themselves. The snug retreat was cozily and completely furnished, as of course was possible for one who had the utensils and furniture of a great deserted city at her disposal.

"We had two boats once," said the girl, answering Speare's question. "That was how we brought so many things. When father died, I sank the boats. I did not dare jeopardize the island's safety with them. I have all I need here. Preserved and tinned food, books, heating machines, everything . . . only sometimes I have been so lonely and restless that I could not bear to stay a moment longer. That was why I went out today." She smiled. "I'm glad I went," she added, simply.

They had now gone down several flights, and the girl touched a switch which flooded with light a room unmistakably masculine in equipment.

"This was my father's," said the girl. "Now it is yours. You will find clothing, everything you need here. My rooms are above. I'll call you as soon as I have prepared some food."

When the girl had gone, Speare wondered whether or not it was all a dream. But the room, the furnishings, the books and strange surroundings convinced him that it was as real as his own identity. He walked about the room, examining the furniture and furnishings, becoming so engrossed in his task that he was not ready when his new friend's clear voice called down to him. He hastily donned one of the robes that he found in a golden wardrobe, and after a glance into a mirror of burnished silver, concluded that there was a good deal to be said for the costumes of Atlantis.

The girl, her name was Dhera, met him at the head of the stairs, all smiles. It touched Speare's heart to notice that after such a day, she had rearranged her hair in smoky red ribbons, and arrayed herself in a

silken robe of the same color, with a collar of the most vivid white he had ever seen. She led him to the table where the fragrant viands reminded him that he had not had a decent meal in days. And so began the most delightful evening of his life. The peace and security of the island, after the dangers of the day, the comfort and restfulness of the room after a long period of hardship and toil, the little home bright with light and friendship, after days of loneliness in darkness, and the presence of beauty personified in the person of Dhera, . . . a man would have been hard to please if the lot of Speare did not satisfy him.

Both Dhera and Spear were bursting with eager questions, and, womanlike, Dhera asked hers first. And Speare told her of the world from which he had come, and on which her ancestors had lived ages ago. Speare might have gone on answering questions far into the night, but he had his own to propound. They had finished their meal by this time, and before answering his questions, Dhera led him to an adjoining room.

"This," she said, pointing to a machine, "can tell you much more quickly than I."

A Glimpse into the Past

WHETHER it was a history of the Air City acted by appropriate characters, or an actual moving photograph of the great events of the city's history, Speare did not know. But Dhera had flashed off the lights, and he was looking at the scenes of thousands of years ago. He saw the great island of Atlantis, embraced by warm blue seas, and dwelling there a wise and happy nation. And as Speare could understand Dhera's thoughts though not her language, so he felt and understood the thoughts of these shadows on the screen. He saw them live their daily lives and marvelled at their great cities which far outshone in splendor and magnitude the greatest cities of his own time. Their science, engineering, and mechanics so far transcended his own knowledge, that he felt like some intelligent native of the Africa bush trying to understand a radio which he is seeing for the first time. The one blot on an otherwise perfect picture was the fact that slavery was practiced, and a subject race groaned beneath this yoke.

As the picture sped its story along on the wings of light, Speare saw the day dawn when the scientists of the great island realized that it must sink beneath the waves. Many did not believe at first, but when the science of the whole nation united in proclaiming the wrath to come, disbelief vanished. In its stead appeared a mighty effort to save the entire population. Boats were suggested. But whither could they go and be sure of a welcome? Necessity as ever was the mother of invention, and one of the seers laid before the people a plan that would save them all. A city, that would float in the sky far above the waters, and do so continually.

I remember that I interrupted Speare at this point of his story. "How could such a city maintain itself in the air?" I demanded. Speare laughed.

"It does seem like a problem, from the point of view of our science, doesn't it? But it didn't phase them at all. We know how to create electricity from matter. They knew how to create matter from electricity, or what amounted to that. You know and I know that the chair on which you are sitting only holds your weight because particles of electricity are bombarding you with terrific force and thus keeping you there. Those wizards of Atlantis had learned to direct a stream of flying electrons so that they became in effect a solid column of matter.

"Provide any mass with the result of that knowledge and you could have a city in the air. The entire lower floor of the City of Atlantis was covered with huge and intricate machinery, which was in automatic operation, and was ceaseless in its activity. Before the City had risen in the air so many experiments had been made on all parts of the machinery to insure its dependability that it was practically flawless. It checked itself automatically in the most efficient manner I have ever seen.

"The entire wall space of one of the upper floors was divided into tiny squares. Each of these squares contained a description of some part of that machinery below, and its correct position in relation to the rest of the mechanism. And each square was literally connected with the part which it described. If any defect occurred in the machinery the square immediately fell forward, disconnected from the rest of the squares held together by the activity of the parts they connected."

"What was the purpose of that machinery?" I asked.

"To keep the City aloft," Speare answered. "Every second the huge machine sends through each square inch of the floor a flying stream of electrons, which makes practically a solid, though invisible, foundation ten miles in depth. That seems a hard saying, eh? Well, so it is. Just as hard as showing a Hottentot a pool of water and telling him that you could shoot tons of metal up into the air with it. But isn't that what a hydraulic elevator does? Anything is easy once you know how. And they knew how."

"But those brutes who attacked Dhera on the day you met her, were they able to do things like that?"

"No, but they knew the machines had to be fueled. Better men than they had invented them, but these fellows knew how to run them; that had been the job of slaves anyway. And they knew that the machines must be kept going if they were to escape hurtling into the ocean below. All they had to do was fuel them. The machines, as in fact all the machines in that city, were operated by radio-active power and had been made foolproof at the very beginning."

The sights that Speare saw in the picture history of that city were wonderful beyond words. He saw ten great cities similar to the one on which he had landed rise into the air, and a short time later the fair Isle of Atlantis, beautiful with hill, forest, and vale, majestic with proud cities, sink to a watery grave in the throes of a volcanic unheaval. The survivors threw wreaths on the waters where Atlantis had lain, and then closed and sealed their cities to prepare for their journey high into the air.

Speare saw in the pictures before him a great hollow, cubical block of crystalline rock, two miles square, floating in space. It was entirely enclosed, both for warmth and air. It was more like a great house in that sense. There were no buildings; only great chambers cut out of the living rock. The whole thing had been cut from the bowels of the lost continent and worked out in detail in the years that preceded the catastrophe. A great

labyrinth it was, floating aloft in space above an ignorant world. "And these people were as well adapted to their way of living, far better adapted in fact than are we," Speare said.

A Rebel Speaks

THEY had learned to find nourishment in anything. In this they were as efficient as termites. Almost anything on their little sky island was potential food. Only where the white ants learned to do this through a process of mutation in that direction, the inhabitants of the city of the air did it with the aid of their science.

"Do not think that they ate a sort of breakfast food, a kind of victual that was dry and tasteless," Speare told me. "The meals I ate there far surpassed anything that I ever ate here on earth."

"Was there any danger of their starving?" I asked.

"No. Many of the lower floors of the city were devoted to the growing of plants and vegetables yielding bulky starchy material. This stuff was the basis for all the food consumed in the air city. The chemists took it and added to it the flavors necessary to make it delicious. Many animals were bred also. And some of the lower floors were used for the breeding and herding of these," Speare replied.

"But," I inquired, "how could they afford room for areas devoted to food and animals. It seems to me they would need considerable more room than they possessed merely to live and breathe."

"Think a moment," Speare answered. "This great city was two miles square. The floors were fifty feet apart. That makes a total of two hundred floors, each one two miles square, and giving the 'City' an area of eight hundred square miles . . . plenty of room, you see, for everything. The population of the place was exactly one million. And there was more than enough room for all of them. The outer walls were of course the most highly prized locations for residence. Here the nobles and the great of the island city lived in spacious abundance.

"Below, in the dark labyrinth of the city lived the serfs in miserable poverty. The outer shell of the city was gay and laughing. The inner core was dark with oppression and misery. There were three great classes on the island . . . the nobles, descendants of the great Atlantean war lords—haughty, proud, and now degenerate. The next class were the engineers, scientists, and artists on whom the fate of the city really rested. Below these were the serfs, no longer attached to the land, and reduced to abject slavery, now crowded together in the least desirable portions of the island city to drag out their weary lives. They weren't kept in filth and vermin, I don't mean that. They were cared for, overlooked and tended like well-bred cattle, but there was no beauty or color or joy in their drab lives. They rose like cattle in the morning, going to their tasks at the great machines which supplied the city with its needs, and at evening they came home, *tired like cattle*. True, doctors looked after their health and other officials saw to it that their food and air were of a nature to keep them strong and well, but theirs was a joyless life, broken only by orgies allowed by their masters once a month, when the poor creatures tried in lust and drunkenness to forget their fate."

"But how is it that we have never seen these cities."

"Oh, they arranged for that by a process of completely absorbing all light rays and what you might call 'distilling' the others. They allowed none to escape very far so none reached us."

As the picture unfolded its thrilling tapestry, Speare became so absorbed in it that he even forgot the presence of Dhera. He heard the roar of the City's mighty machines, a constant undertone to all the throbbing life of the place.

To the accompaniment of the machines' quiet "whirr" the history of decades passed quickly before Speare's eyes. He saw the coronations of kings in the great square before the royal palace in the capital city of the air, and he saw the nobility of the nine other cities winging their way to the ceremonies in their strange and wonderful air planes. For decades and centuries, the history of the Cities of Atlantis flowed easily and smoothly along, if we except the dismal lives of the slaves. Then suddenly councils, assemblies, and committees were meeting to discuss a grave subject. A noble, the ruler of a city, had made the outrageous suggestion that the lot of the slaves was a poor and miserable one. He asked that their lives be made brighter. And so vehement were his pleas and so loved was he by his own people, that the matter was brought to the attention of the King.

Speare's head was raised with admiration, and a thrill shot down his spine as he saw this noble demanding of a degenerate king and his evil councillors the freedom of the slaves. The plea was refused.

Speare became aware of Dhera . . . she was sobbing. "That Noble was my father," she said.

Treachery!

DHERA'S father came home to his city, and after much searching of heart sent word to his king that he renounced his allegiance to him, and would rule his own city and give freedom to his slaves. He himself was of the royal blood and entitled to rule.

The king sent a treacherous, kindly reply, but in the night the winged fleets of the nine sister cities descended upon Dhera's island and put all the inhabitants to the sword. The slave armies caught their brothers unaware, and a terrible massacre ensued . . . and in the midst of this picture the film ran out.

"Now, perhaps, you understand," said Dhera, "what has happened to this, my city. Father and I escaped in our plane through a secret sally-port, while the soldiers were seeking our blood. A small group of men was left here to keep running the gravity and warmth engines, and to track down any who had escaped the fury of the first onslaught. Those are the men we fought today. They never saw me before. Father and I returned, after flying for many days, and we escaped being seen on our return. We were not expected. But today I was so surprised by seeing you that I was not upon my guard, and they came upon me unaware."

'How is it that you have such superior weapons to theirs?" Speare asked.

"The nobles have never allowed the slaves to use any weapon but the sword, and have kept all scientific weapons in their own hands, in order to maintain their position. Father taught me how to use them."

For two happy years Speare remained a willing prisoner upon the city in the air, and so content was he in that time that the years seemed to pass as a watch in the night. Every day held new joys in store for him as he and Dhera explored the ancient city. He learned how the ancient scientists had circumvented the lack of rain in the enclosed city by combining oxygen and hydrogen taken from the air, and so producing quantities of water whenever it was needed. He saw the apparatus which ventilated the great city, and marvelled at the atomic engines which abounded everywhere about him. On the island where he and Dhera lived, everything was done by the aid of small powerful little atomic engines. Heating, lighting, all the little refinements that make for comfort and luxury were made possible by these little radio-active servants.

In the space provided by the eight hundred square miles of city levels the two fugitives easily managed to escape the notice and attention of the small garrison on duty in the place. Once or twice they met with small parties of soldiers, but the superior weapons of Speare and Dhera easily annihilated their enemies and none returned to tell that they had been seen. The dead bodies of their comrades acted as a deterrent to the soldiers who found them. They learned to give the mysterious pair who possessed such deadly power, a wide berth.

It was necessary that these soldiers have water, and they came to the sloping shores of the city's lake to supply their needs. Speare and Dhera could have easily killed them all as they did so, but instead, they managed to arrange a truce with them. They found that the slaves had been deceived by foul lies concerning the city, and these lies had convinced the soldiers that they were doing a worthy deed in killing the inhabitants of the city.

There were several very intelligent men among the soldiers . . . men who had not been born slaves, but who, through misfortune and hatred, had lost their position among the second estate on the cities of Atlantis. These understood readily what had happened, and the slave soldiers after that held a respect amounting almost to reverence for the daughter of the noble who had lost his life to try to set them free. At the end of another year a plane landed from the capital city with the news that a great fleet had been built to transport colonists from the other cities to the one on which they were situated.

Speare urged Dhera to leave with him on the rocket plane which she and her father had used in their earlier escape. But Dhera could not go. Her heart was so bound up in the work that her father had started that she would rather face death in the city than leave the slaves in bondage. Perhaps the lot of the slaves did not touch Speare, but the thought of losing Dhera did. He laid before her a plan of freeing the slaves of all the ten cities of Atlantis. The blood of the kings ran in her veins. Why not lead the slaves in revolt against the weak and dastardly king and his false councillors?

He put his case so eloquently that Dhera capitulated and they left the city for the earth, to make preparations and to manufacture arms for the coming struggle.

They had brought much gold in their plane and their tremendous wealth kept a great factory busy making arms of the most deadly Atlantean model with which to arm the slaves. Their plan was to fly back in their plane and to enter the secret sally port which the slaves they had known (now their co-conspirators) were to open for them upon a set day.

* * * * *

Was Speare mad? Was his whole story a fabric woven by a disordered brain? I do not know. But what then of the strange weapons, the clock and gold dishes he gave me and that I still possess?

What also of the mystery of Dhera whom I swear was not of this earth!

There were these mysteries and one other . . .

Four years afterwards, upon my return to America after a long period spent in Asia as a war correspondent, I found that Speare had gone, no one knew where. The great factory was silent, and slowly falling into ruin. Speare had left no address. He had simply disappeared from the face of the earth.

His tale and his whereabouts continued to exercise my mind. And then occurred the thing which convinced me that I, not Speare, had been the fool.

You remember no doubt the discovery by a tramp steamer in the mid-Southern Atlantic of a strange plane floating on the waters. A scientist, taking a health voyage on the tramp you remember, wirelessed home to his colleagues the remarkable fact that the plane and its occupants (five dead men) were strange and bizarre, and that there were documents in a strange language and arms and implements utterly unknown on this earth.

I was sent by my paper to cover this story. The news had intrigued men, and I went, hoping to find a clue to the mystery of Speare and Dhera. I found it . . . a proof so incontestable that I no longer doubt. Among the coins Speare had shown me was a great begemmed medal bearing the head of a man. This he had told me was a medal worn by the great nobles of the cities of Atlantis when they held authority under the king. Dhera's father had worn one . . . the one Speare showed me.

The men in the plane, the strange mysterious plane the like of which no engineer on earth had ever seen, were clothed in a costume unmistakably similar to those Speare had brought with him from Atlantis. About the neck of one of them, on a heavy gold chain, hung a medal similar to the one I have described . . . with this exception. Instead of the face of the old king, there were two faces on the medal. One was unmistakably that of Dhera . . . the other was Speare's.

THE END.

TO OUR READERS
AN IMPORTANT ANNOUNCEMENT
Will Be Found on Page 389—*Don't Miss It!*

The City on the Cloud

By L. TAYLOR HANSEN

Illustrated by Marchioni

HE strolled into my office in Science Hall, University of California, one day last fall. I had just finished a particularly trying period with a Freshman class in Physics.

I have forgotten his name. Perhaps he did not tell me. After all it does not matter, for I do not suppose I could identify him again out of the faces that stream past on Broadway, unless I peered closely and watched for a pair of washed-out blue eyes with wrinkles around their corners, set in a weatherbeaten little face. I was, therefore, not surprised when he told me that he was a man of the desert. Indeed, on closer inspection I saw that he had an air of being ill at ease in his cheap store suit, the well-creased trousers which hinted at its newness. He took off his hat and twirled it in his fingers uneasily.

"Are you the Professor of Physics?"

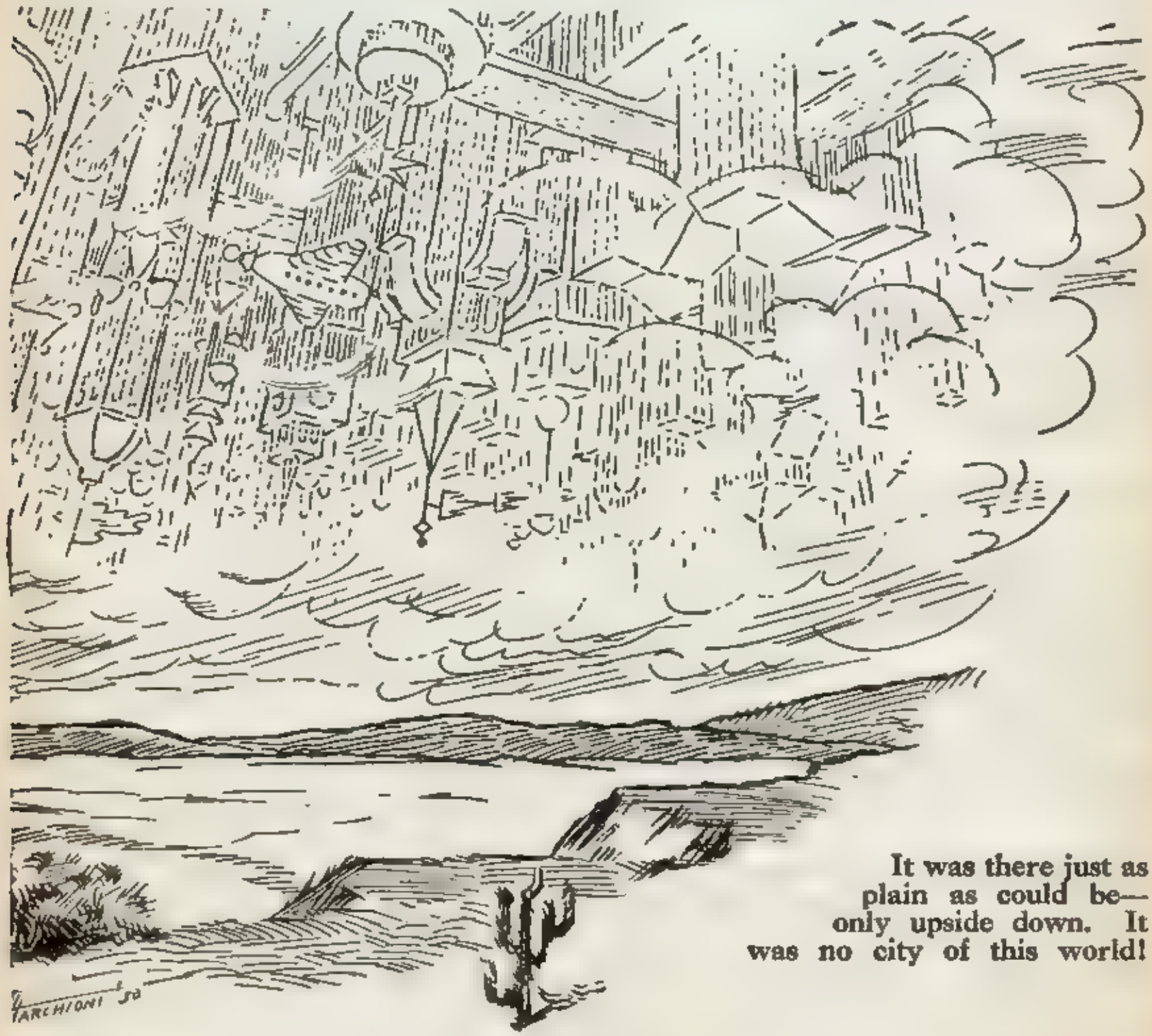
I admitted that I was, and offered him a seat which he took gingerly, sitting on the very tip of the chair as if about to take flight at the first opportunity. As diplomatically as possible, I smiled and asked what I could do for him.

He licked his thin, brown lips and took a long breath.

"Well sir, you see it is this way. I'm a miner. I belong to the desert. That is, I mean that I'm a gold miner. But not all at one place you understand."

"I see. You travel around on the desert, looking for gold?"

"Yessir," much relieved, "that's the idee. Now I've lived on the desert for well nigh twenty years, an' I've seen some queer sights in my time, I have."



It was there just as plain as could be—only upside down. It was no city of this world!

"I don't doubt that," I nodded. For no one can imagine, until he has talked over a greasewood campfire to one of these wanderers, generally known as "desert rats," what strange yarns they can tell.

"But Shelley knows what sights we have seen. You bet Shelley knows."

"Shelley?"

"Yes sir. She's my burro. I first saw the name on a book that I found in a hotel room with some high soundin' words in it. I took a fancy to that name. It kind of reminds me of sea-shells an' one likes to think

of the sea when the sun is bakin' up the cactus an' the lizard holds his tail up in the air to keep it off the hot ground when he runs from one sliver of shade to another. It's funny to see a lizard do that."

I nodded encouragement.

"Well, now as to what I come for. Last week me an' Rattlesnake Ed—he got his name for bein' champeen snake killer. Claims he has killed ten thousand rattlers, but there's some as claims he seen part of 'em come out of empty whiskey bottles."

He slapped his knees and gave a high-pitched chuckle.

"Well Ed an' me gets in a regular brain-twistin' argyment last week in front of the main store of Sunshade over mirages. So the boss of the store comes out an' says as you're the only man he thinks as knows enough to settle the argyment. Says as how you come through there last summer with an exhibition."

"Expedition, you mean."

"Yes sir. So they took up a collection for me to come here an' see you just to find out what causes these mirages an' mebbe settle that argyment."

I laughed.

"So you are after some scientific explanation which will settle an argument?"

"I'm not sayin' that it will get settled all together, but the dust may get wet down a little so we can get our directions you understand."

WE are gradually coming to realize that many of the so called "fables, myths and old wives' tales" with which our literature is filled are based on something more than mere gossip or wild imaginings. The Siberian peasants who witnessed a terrible deluge of meteors from the sky twenty years ago must have passed on to their children a story of devils and hell-fire. Yet they were telling about something which we know to be an actuality.

We know that nature is so vast and so filled with unsuspected possibilities that it is often difficult to draw the line at belief and disbelief. For as one scientist has said, "given enough time, every thing that is possible that we can imagine will happen."

The simple story that is told here, therefore, can be laughed at as a fairy tale. Or to a more serious thinker it can be an occurrence that might happen only once in a million years. But given the proper circumstances it happens and hence this interesting tale.

How It Happens

"PERHAPS," I admitted thoughtfully, "the reason for the mirage may be a little hard to understand because there are so many types and combinations of types, but I will try to make my explanations as simple as possible. Now in the first place, you know that our atmosphere is composed of air strata," and noting his puzzled look, I added quickly: "An air stratum is a layer of air."

He nodded.

"These layers of air fold around our earth one above the other much like the layers of skin fold around an onion. Some are warmer than others, and mirages occur where there is an uneven heating of these atmospheric layers or strata, as in the desert where the sands are so hot, or over the sea."

He nodded slowly.

"Now I suppose that you have speared fish or tried to pick something out of a stream?"

"Yes sir."

"Then you know that the object is not just where it appears to be?"

"Yes sir. Just zacktly, an' that reminds me . . ."

"Just a moment, and then you will have your explanation of mirages. The reason that the fish is not where he appears to be is simply this—that the light rays coming from the layer of water into the layer of air above are bent at an angle and do not come straight; thus giving the fish his illusive qualities."

I was beginning to fear that I had lost him, when he nodded again.

"And why is that?" he asked.

"Because of density. The water has a greater density than the air. That is, it is heavier." I tried to explain.

"Now because of the unequal heating, as I said, of certain regions on the surface of the earth, air strata or sometimes air pockets, will have different densities. For instance, we will take an observer on the desert, and place between him and the object to be observed—say a distant mountain—a mass of air that has greater density than that surrounding it. This mass of air then becomes your stream of water into which you are looking at an object. In other words, the light rays of the original mountain, passing through the air mass of greater density, are bent at an angle as they come to the observer, and the mountain therefore appears to be in the air above where it really exists. That is the mirage of refraction."

"Re—what?"

"Refraction, beause the light rays are refracted."

"An' is there other kinds?"

"Yes, there is the mirage of reflection, as well as infinite varieties and combinations of the two."

"It aint goin' to be so easy to understand after all, is it?"

"Well, no, it isn't. However, I believe that if I can explain the two main types, that is enough for your friends on the desert. You understand something of the mirage of refraction now don't you?"

"Yes sir."

"Then you have mastered the hardest type. The mirage of reflection is much the easiest to understand. If you will take a large mirror and hold it up on the ceiling in some fashion, and then stand back from it and look up, you will see the objects on the other side of the room. Here on a small scale you see what happens in the mirage of reflection. As you look up, the objects appear to be upside down."

He nodded.

An Alluring Picture

"NOW we will suppose that we have a cloud with a flat bottom in the desert. A cloud, we must remember has a lesser density than the surrounding air. This cloud's flat bottom then acts as our mirror on a gigantic scale. In it we will see a lake reflected upside

down which is in reality out of sight, below the curve of the horizon."

"But I've seen 'em upside down when there ain't no clouds for mirrors."

"Then it was another air strata that acted as your mirror, one of lesser density, we will say, than the one from which you were looking."

"I can begin to see where all them combinations come in."

"Yes, a particular mirage may be a complicated affair."

"But anyhow, the thing that you see up there is sure to be found somewhere—that part is certain, ain't it?"

"Yes, of course. On the other hand, you may see an object so distorted that you will not recognize the original."

"But a plain thing like a bridge?"

"In that case, I would say that the original exists at no very great distance."

"I thought so—that it was to be found somewhere," he grinned triumphantly. "That's just what I says to Ed. For don't I know? Didn't I see a great bridge in the skies at Death Valley near the Devil's Golf Course? Didn't I see it hung up there like it was a spannin' the tops of the Funeral Range? Shelley seen it too. She looked up there an' you never in your life seen such surprise in any burro's eyes as when she turned back to me as if to say: 'You ain't drunk this far away from Mexico, an' besides I seen it too.' Yes, sir! She's a smart burro she is. Never says nothin' but always listens so thoughtful-like when you explain somethin' to her that you just know she must have uncommon sense."

L. TAYLOR HANSEN

"But about the bridge. Why were you so certain about seeing the original? Did you see the original of your bridge?"

"Yes sir. That I did. It was two years later when I had to go to Canady for a certain miner's map from a feller. I seen it in that town—Edmonton it was."

"Are you certain that it was the same bridge?"

"Yes sir. An' I seen lots of bridges too, but this here one was dissimilar."

"A pretty long span for a mirage," I reflected thoughtfully, "but instances have been recorded of mirages of icebergs in the warm waters of the Mediterranean."

"That's a strange bit of Hell that valley. But you was there yourself last spring, wasn't you?"

"Indeed I was and it is a week that I will never forget. The geology department of our University was at work on the Fossil Beds. In fact, they had just uncovered a three-toed horse. But strange to say, old Death Valley made me wish at times that I had been an artist instead of a physicist. I will never forget those dawns of magic color when the sun appeared with an angry glow; or the intolerable heat of the noon-day (for it was hot even then) when the sun crept up the bowl of the sky with a withering glare, and the grey of the sage grew hazy with heat while the ochre and brick-red of the mountains danced; nor sometimes just before sunset, when the purple of the long desert shadows would rise and quench out the flame of the mountain peaks.

"I will never forget how once the heat over the Salt Beds seemed to take on veils of color and sway, when suddenly through the weirdness of it all, as if sketched on a giant canvas, I saw a greenish-glowing sunset on a vast, fantastic plain and I knew that I had been treated to the desert's master-touch of beauty—the mirage."

"Yes sir. I seen that an' more but I aint got all them words to tell it with. I can only stare an' wonder, when it grips me here," touching his heart.

I nodded understandingly. Indeed, the desert had often impressed me in much the same way.

"But about them mirages. Couldn't there be some way with them air layers for mirrors that a picture of something could be reflected from one world to another?"

"You mean a mirage that would be a replica of a scene on another planet?"

"Yes sir. Just 'zacktly."

"Of course, I would not like to state as a certainty that such a thing could happen. However, I will say that an image can be projected through tremendous distance if we have a cloud or similar phenomenon which would act as a lens just over the object and in such an exact position that two parallel beams of light carried through the intervening space would strike a similar cloud near the observer at just the exact angle to reach the eye of the man who was watching. But . . ."

An Amazing Sight

"THEN it is possible."

"Though very improbable that such a chain of circumstances so exact would ever happen. . . ."

"Mebbe. But there is lots of worlds an' we aint the only one with life, are we?"

"Any answer that I might give to such a question must be based purely upon speculation."

"Then what do you 'spect?"

"I mean that we do not know. Although it is possible, or we might say even probable that certain of the planets are inhabited by some type of life, yet we do not know this to be a fact."

"Well if you don't know, I'll tell you for sure. One of 'em is. I don't know what one, but one of them other worlds has cities. I know because I seen it."

"What?"

"Yes sir. That's the gospel of it. An' I wasn't drunk either because I was a good two hundred miles from a saloon at the time, even if it did happen in Mexico."

I tried to control the smile that had suddenly threatened to become a grin. Here indeed was a real "character."

"You can smile if you want to, but how do you know it couldn't happen when you just said it might . . ."

I suppressed the smile. After all, I had not intended to ridicule the idea.

"Tell me about it," I urged.

"Wall—it was last summer, when I was a'followin' an old claim. I had struck off from Chihuahua, north by west. I reckon you know what that country is—Hell's own. An' in summer too, that aint no exaggeration. Luck had been with me—all the water holes pretty full considerin' . . . but hot? I'd rather live in a furnace. Wall . . . one day when the sun was creepin' along witherin' everything that it could burn up, I seen a cool lookin' overhangin' rock right in my way, invitin' me to rest in the shade.

"Shelley looks at the rock with such longin' as if she thought we ought to take the hint, an' I pronto up an' agrees with her by stretchin' out. When I layed my head back on my arms howsomever, an' looks up, I seen a queer cloud just off to the side a little from right overhead. It had a funny muddled pinkish look. Funny lookin' it was. I was just sort of lazy-like puzlin' over it when the mussy look begun to start clearin'—an' man—what I seen a'takin' shape up there just jerked me right up on my two feet.

"It was there just as plain as can be, only upside down as if I was in the sky an' them buildings was under me. It was there, but it was no city of this world. I couldn't a'seen it all you understand for the edges got misty like, so there was really only about three of them buildings that was real plain. But them three was enough to turn your hair white and put the cussedest bartender in Tia Juana on the water wagon—only I didn't have no whiskey."

I nodded to assure him that I believed the statement. I had the smile pretty well under control by now.

"Strange buildings you say?" I asked by way of encouragement.

"Say they wasn't strange, they was damned peculiar. First I pinched myself to be sure that I wasn't dreamin'. Then I took a long breath and looked back. Yep it was still there.

"I wish I had all of your words to tell you how funny they was. You couldn't see down to the bottom of them canyons of streets so you mightn't have known that they was streets, if it hadn't been for them bridges . . . Howsomever, thinkin' it over afterwards puzzlin'-like, I come to the idee that the towers was the creepiest of all. No man on this earth ever made them pinkish, many sided, hundred-storied what-shall-I-call-'ems."

"Pinnacles?" I suggested, becoming rather interested in spite of myself. I had heard many odd tales in my fifteen years of teaching experience, most of them it is true, in the form of excuses, but I was beginning to give this old chap the credit of having broken the record.

"Pinnacles! Yes sir! That's just what they was," slapping his hand upon his knee, gleefully—"What a lot of words you do know. They was pinnacles. Like the way the ones in Bryce Canyon would look to an ant. Sort of overgrown you know. Hundreds of stories high they was, with no bottoms to the narrow streets between their sides, an' their slender bridges like spider's strings from floor to floor over them bottomless canyons of streets. . . . I never seen so many bridges in my life—goin' in every direction they was. An' then along the edges of each floor run what looked like wide pavements. . . . No sir. That there mirage was no sight from this world."

It Vanishes!

HE stopped a moment and shook his head thoughtfully, while he rolled the edge of his hat brim between his stumpy, calloused fingers.

"How do you know that the projections were pavements?"

"Because I seen the traffic."

"The traffic?" I gasped.

"Yes sir. Tiny black specs was passin' along them pavements and across them bridges. Course I couldn't tell what they looked like. I was too far away. It was as if I saw a bunch of ants walkin' over an ant hill an' tried to guess their shape from horseback. Some seemed bigger than others as if they might be machines mebbe. I'm just sayin' mebbe Mister Professor. An' I'm not lyin' even if you do think I am."

"Of course," I murmured, "it was a most remarkable illusion."

"No sir. It was no illushion. I just got through tellin' you that I hadn't touched no whiskey for days. I could a seen what kind of men they was if I'd only been closer or if I only had a glass. Say! I'd have given my last drop of water just then for a pair of field glasses, but I never carried such."

I nodded encouragingly. (To look at the fellow, as I said, one would never have suspected it.)

"Then, just as I was standin' there and breakin' my neck off backward, the creepiest thing of all happened, It made me all pop-eyes an' goose pimples.

"A long, scaley green thing come from somewhere in the air an' lit on the flat top of one of them—pinnacles. Yes sir. An' I begun strainin' my eyes to make certain if it was the black specs I seen swarmin' from the shiny sides of that there train-flier. If I could only a'seen how they got to the lower levels of pavements . . . but to be real truthful, I wouldn't bet my liver about it. For they was already beginnin' to get hazy. First I thought it was my eyes goin' bad because it was so plain a minute before, but I soon saw that the whole city was fadin'."

"Suddenly, or slowly?"

"Wall it just kind of wavered like somebody shook the picture, an' then the buildin's all begun to sort of run together soupy-like. After that it just faded out—even the pinkish color. I stood there watchin' for hours. Fact is, I pitched camp right there, I marked the spot where I stood with a circle but sunset come on—the purple shadows drowned out the fire on the mountain tops, but the city never come back. No sir—never again."

We sat in silence a moment and then suddenly he jumped to his feet.

"But I hadn't meant to tell you this. That part wasn't in the bargain."

"What does it matter? I had already given you my answer about mirages and I can assure you the story

did not influence me."

"But you did say that the mirage is a picture of something that is really to be found—if you can find it."

"Yes, provided that you did not see a distorted image whose original you would not be able to recognize."

He backed toward the door awkwardly as I rose from my chair.

"Thank you for a'tellin' me what you did, but I'm a'seein' where our argyment is sure not a'goin' to be settled. I know how Rattlesnake Ed likes loopholes in argyments an' natchurlly it's up to me to tell him all these loopholes you put in, even though you backed me up an' you know you did."

Opening the door with one hand behind his back, he bowed again.

"I'm not holdin' it agin you that you're kickin' up a regular sand-storm of an argyment with all them mebbes you put in, but howsomever, I am a'tellin' you an' everybody else that the city with them there—pinnacles, an' bridges, an' train-flier, was no sight from this world."

And belligerently closing my office door behind him, he strolled down the hall, and out of my life.

THE END.

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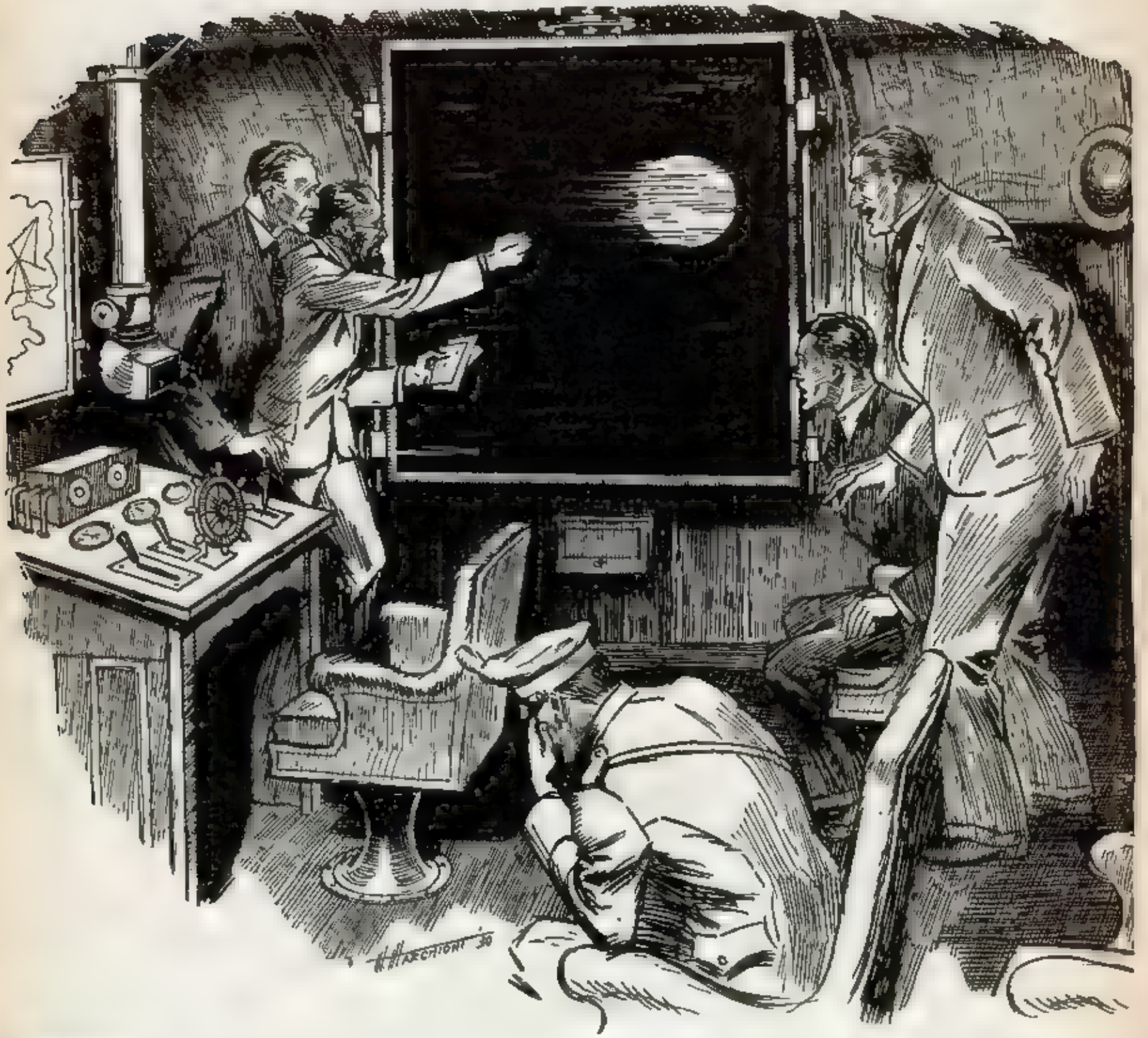
AMAZING DETECTIVE TALES

ON SALE SEPTEMBER 15th

Faster Than Light

By J. HARVEY HAGGARD

932 5th St., San Bernardino, Cal.



"GENTLEMEN, is there anyone present who is afraid to die?"

It was several moments after this astounding question had penetrated the monotonous humdrum sounds of the interior of the speeding monoway that I realized its significance. My brain seemed at first to take only subconscious notice of the statement, but my mind analyzing its meaning at peaceful leisure suddenly started, awakened to frightened expectancy.

The monoway was not crowded. Only a person here or there occupied seats to either side of the narrow aisle which ran the length of the passenger compartment of the monorail. Yet each and every person was staring intently toward the forward end of the car, where a little man stood silently, regarding us with a queer grim smile playing about his lips. Just behind him stood the conductor, who clutched wildly at the seat nearest him, and stared beyond us in frozen terror—a horrible fear pictured in the paralyzed muscles which contorted his mouth into a leering grimace.

"Gentlemen," repeated the little man, calmly. I saw that he had the attention of everyone present in the car. *"Is there anyone here afraid to die?* If so, it would be

most opportune that he should say his prayers. The monoway, speeding through thin-space between Paris-station and New York, has broken from the gravity of the earth and is now rapidly gaining speed as it falls swiftly towards the sun!"

(*Illustrated by Marchioni*)

"Look, look," shouted the professor. The scene on the side wall was swiftly blurring and fading.

Thus concluding, he sat down calmly. The conductor had flung a hand before his face, hiding from our eyes the terrible expression written there.

For a full minute all was silence, a dead frozen silence, in which no man moved, but stared incredulously at the place where the scene had been enacted by the calm little man.

Then all were shouting, leaping. A huge Englishman, burly and redfaced, brushed roughly by me and sprang up the aisle, knocking the paper I had been reading from my numbed hands. A young woman with a child suddenly screamed and gathered the frightened child to her frantic breast, and his infant wails were soon added to her own wild lamentations. A spectacled clerical man in front of me rose to his feet, paused, the fingers of one hand resting feebly upon his chin. A long lanky Yankee started in his seat, then settled back, his blue eyes in troubled retrospection, a tongue wetting his dry lips.

Springing to my feet, I stumbled down the aisle, yelling incoherent phrases of no meaning, my dazed brain striving to inure itself to the new conditions. The Englishman had already reached the side of the small man, and was shouting to him, clutch-at him, who in turn was endeavoring to ward him off. The conductor had slumped to a seat and buried his face into his hands.

For a long space of time all was hubbub, my cries added to those of the Englishman, the sobs of the conductor crackling high and dry through the raucous noise, the falsetto wails of the mother and the frightened cries of the babe adding to the conglomeration. . . .

I have no way of recording all those sensations which then smote me, for my mentality was numbed, and my memory will not revive those impressions received during the next few minutes—or hours? I only know that it seemed an eternity, that I seemed tired and exhausted, sitting weakly on the edge of the seat behind the little man, one hand propping up my chin. The Englishman had assumed a position across the aisle, and was still babbling at the little man. The woman's crying had subsided somewhat. There arose a dull monotone which rose and fell, and I recognized the tone of a man who supplicated God for protection.

Madness at Death

THEN a droll humorous chuckle sounded in my ears and a drawling voice admonished with no trace of emotion, "You say, Professor, somethin' went wrong with th' engin'."

Everyone in the car leaned forward.

"Nothing of the kind, my dear boy," returned the ready voice of the little man. I realized by their enunciation that a conversation had been progressing between the two for several moments. "You are no doubt familiar with the fact that the monoway of today is controlled by radio waves. There is no such thing as an engin' in a modern monoway, as you are no doubt aware."

"Wal, there's very little I reckon I know about a monoway," reiterated the languid voice with some show of interest.

This sensible — yet insane—conversation, under the circumstances, revived me to some extent to a logical realization of facts. Raising my head I perceived that the little man termed "Professor" was turned to converse with the Yankee, who still sprawled in the seat which he had first occupied.

"So," exclaimed the Professor, turning to me. "Another to join in this conversation?"

"Yes," spoke the long fellow indolently, rubbing his chin meditatively, "A little 'tate a tate' before death, you might say."

"Yes," agreed the Professor. "Most admirably put, though somewhat crude. However, I am very interested in analyzing human thoughts upon the approach of death. Scientifically, it is very intriguing!"

"Oh, shure, shure. Theoretically beautiful, but howsomeever impractical, my dear Professor."

I sat listening to this conversation, heedless of its meaning, thinking only of the monoway falling toward destruction, yet at the same time the words of the pair registered on my brain as the ravings of men suddenly demented at the portal of death.

"Why!" I exclaimed. "We are all crazy!"

The declaration was meaningless. The Yankee laughed and rubbed his chin. The little man stared at me with scientific interest in his eyes.

"Interesting," he remarked. "Very."

"Yet, Professor, perfectly natural."

Thereafter I decided to be quiet, merely staring dazedly at them.

"The peregrinations of a human mind are always interesting in emotional crises," remarked the Professor.

"Shure. I agree with yu' there, only o' course I can't talk and tell what I want to and what I think about, like yu'. Anyhow, it's just as interesting. I get lots of kick just lookin' kinda' from outside into my own brain and watchin' the turmoil that's even now ragin' within, if you know what I mean."

"I think I understand."

For a time they lapsed into silence, the Professor staring into space, the Yankee surveying the sole of his shoe, which had been elevated upon a crossed knee.

"Listen, damn you!" snarled the Englishman desperately, clenching his fist and scowling at the little man. "You must get us out of this. Think, man, think! There's got to be a way!"

The Professor shook his head. I fell to insane laughter. The Englishman lurched in his seat, held his hands to his throbbing temples.

"By the way," remarked the Professor to the Yankee. "What say we take a little glimpse of the heavenly bodies?"

"Agreed." The pair arose and progressed to the front of the car to a small desk and chair which the conductor generally occupied.

AS we warned our readers, this story is in some ways the most unusual of the AIR WONDER *Cover prize winners. Mr. Haggard insisted on departing from the usual run of stories and giving his imagination full reign. It was only because he did not ask us to take his science too seriously, that he was not given a higher place on the roll of prize winners.*

We must comend Mr. Haggard for developing a theme not only original but intensely human. His characters are alive and we can feel with them. There are moments of intense suspense in the story broken by the humor of the Yankee who at the moment of death remains cool and collected.

Such stories always make a deep impression on our readers, especially when as in the present story, they pose an interesting question. What would really happen if we were able to travel beyond the speed of light? Would we find ourselves in a new universe governed perhaps by different laws? Mr. Haggard answers some of these questions for us.

At the Speed of Light!

MANIPULATING a small boxlike compartment, a side of the car was suddenly changed into a brilliant view of the heavenly bodies, the sun occupying the center of an intensely lighted void. The Yankee stared.

"Merely," explained the Professor, "a periscopical arrangement connected with the exterior of the monoway.

"The monoway is——or was—operated—until it left the earth's atmosphere — by electrical impulses. Of course our monoway is little different in principle than the old antique monorails of the twentieth century, merely varying in the fact that instead of using as a guiding stabilizer a solid rail the exterior of the monoway is so designed as to maintain an equilibrium throughout the earth's atmosphere. At either side we have the gigantic discs of glasslike substances spinning at enormous speeds, which gyroscopic motion keeps our monoway on an even keel.

"Our passenger compartment, supplied with oxygen as it climbs to the upper air reaches, is situated between this pair of gyroscopes, while a smaller gyroscope spins above us on a perpendicular plane to the others. Now this periscope—from which you vision the heavenly bodies—is connected to an enormous lens in front of the passenger car which looks directly in the direction which our car is speeding. If, however, any other view of the heavens is wished, various mirrors are arranged

in the bases encircling the gyroscopes, so situated that we are enabled to get any view of the cosmos from the original periscope."

Saying this, the Professor swiftly moved his hands about the minute boxlike compartment and the scene upon the opposite wall shifted.

"Purty good, purty good," complimented the Yankee.

Just then the scene seemed suddenly to blur. The Professor appeared puzzled.

"Whatsa' matter?" queried the Yankee.

"Oh, nothing, nothing," admonished the Professor, noting the recordings of several dials at his side and swiftly making some computations.

Suddenly the woman behind me fell to weeping more loudly.

"Pray, my good woman," shouted a reverent voice, which I knew to be that of the clerical-looking man. "Pray, pray." And he set an example by subsiding again into his religious monotone. The baby squealed, the woman wept hysterically, and the conductor sobbed.

"My heavens!" shouted the Professor, in astonishment for the first time. He wildly figured and refigured, as if unable to believe his senses.

"Look at that!" he cried waving his paper and pencil before the Yankee. "Look at that! Can't you see that the scene through the periscope is fading! I've figured it out! I've figured it out. The force of gravity, acceleration, velocity, see, see!"

"I am afraid," replied the Yankee imperturbably, "that I can't see."

However he glanced at the side wall and scrutinized it swiftly, noting that the scene was swiftly blurring and fading.

"Look! Look!" shouted the Professor in high ecstacy. "Why, man—think of it! Think of it! We are approaching the *speed of light!* We are never to die by rushing into the sun! No. We shall die peacefully, happily—long before that. We shall simply cease to be! Hooray! Hooray!"

"I'm afraid," stammered the Yankee, "I don't see your point!"

"The first men to approach the speed of light!" shouted the Professor, not noting in his emotional outburst the other's query. "Imagine! One hundred and eighty-six thousand miles per second. Incredible! Remarkable! A-maazing!"

"But—"

"And we shall suffer no horrible death. We shall go peacefully—as befits those who contemplate science."

"I am sorry to tell yu' that I can't see!"

"Why, the *Fitzgerald Contraction.*"

"The—what?"

"The Fitzgerald Contraction! What, man, haven't you heard of that? Why, an object which travels at the speed of light has no length. When we reach the speed of light we shall simply cease to have any measurements. See! See! The light is fading on the periscope. It means we are coming closer. 186,000. 186,000. We are going faster every minute. D'ye see now?"

A New World

A LOOK of stupefied wonderment and admiration spread across the features of the Yankee. With a pleased grin he leaned against the desk and stared abstractedly at the dimming image.

"This is goin' to be purty good," he complimented. "Purty good!"

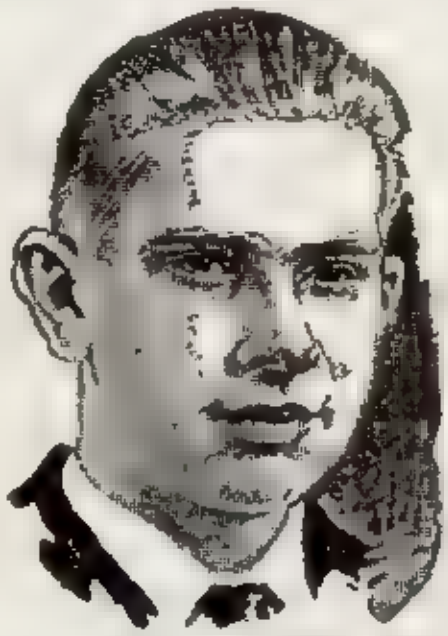
The woman screamed; maybe she understood his words.

"Pray! Pray!" shouted the clerical man.

"For God's sake, Professor," stormed the Englishman. "If you don't save us I'll kill you!" He beat his fists together futilely.

"Purty good," sighed the Yankee. "Purty good."

"Ha, yes," cried the Professor, his eyes burning with scientific zeal. "Another minute of life, I calculate it. It will be a great experiment. Ha, Fitzgerald, we shall see if you lied."



J. HARVEY HAGGARD

"By the way!" exclaimed the Yankee, struck by a sudden thought.

"One minute more—" interrupted the Professor.

"By the way, I'm dawgoned glad to have met you—"

"Three-quarters!"

"Yu' know, yu're a man after me own heart—fearless of death—scornful of human sentiment. Glad to have met yu', feller."

"ONE-HALF!"

"My name is Hankins. Lon Hankins. What's yu'rs?"

"ONE-QUARTER! Carlton. Professor E. Pluribus Carlton."

"Glad to hev' met yu'. *Shake, feller, shake!*"

The Yankee grasped the Professor's outstretched hand. The room suddenly became brilliant with an intense light.

Crash!

A million variations of brilliant colors—and—a soothing peaceful motion—a restful invigorating color of blue pervaded the air and—

"Wal I'll be darned!"

"Unanimous, *my dear Hankins!*"

The ejaculations were of that breathless quality which express the insuperable degree of amazement.

I looked at the screen upon the side wall. A scene of wonderment and color met my eye. The Professor and Hankins were staring at the screen open-mouthed—for—

A world!—an utterly new world—greeted their startled eyes!

A great broad sphere floated serenely below. Thick jungles of green vegetation covered the exterior while a broad azure lake could be seen, its surface waters perfectly clear and reflecting the profusely vegetated shores clearly. However, it was neither the lake nor the primeval forests below which attracted their immediate attention. . . .

At various intervals through the jungles arose tall mounds of raw earth, in the center of each there being

inset a great dome of a jewel-like hue. The faintest tint of pink seemed to exude from the exterior of the dome like radio-active emanations. In the exact center of each dome was a large pit—around its outer edges ran a ledge from which looked numerous doors, methodically arranged. The scene, pictured with a brilliancy of colors unknown upon earthly objects, was further portrayed by the clear blue atmosphere which surrounded the little planet. Off in the distance two miniature suns floated calmly, their light but dimly affecting the clarity of the scene below—which seemed to be lighted by the emanations from the domes themselves.

For moments Professor Carlton stared speechless, then he sighed. Casting a loving glance at his computations he slowly ripped the sheet of figures to shreds. Suddenly he stopped, electrified by a sudden idea.

"I have it!" he cried, smiting a fist into his palm delightedly. "We are in another world—another plane of existence! We are safe. Don't you see, we have progressed into speed and into a different cosmos."

"Undoubtedly," returned the Yankee, still absorbed in the picture upon the side of the monoway. "But as f'r me, I take that for granted. I allus said that science was based too much on hypothesis."

"But it's not!" ejaculated the Professor vehemently. "It decidedly is not!"

"Then, my good comrade, how do you account for this Fitzgerald theory as you calls it!"

"That's it. That's it exactly. Fitzgerald was right."

"Impossible."

"No. When our racing monoway was drawn from the earth's gravity and fell at ever increasing speed toward the sun it soon approached the speed of light. As we fell faster and faster our length in the direction of the sun progressed into nothingness. Then—it reached the speed of light—passed it. Now—mind you this—when the monoway attained the speed of light it was of a *minus* length, therefore it is not existent materially to our other world. *On the other hand,* since we have decreased materially to nil, yet relatively we are still existent. Can't you see?"

The Yankee had listened rather attentively, but he now slowly shook his head.

The Attack

THE Professor became exasperated.

"Listen, you numbskull!" he cried. "Now I'll illustrate, just on your account. I'll go back to the beginning of things and show you how this thing happened.

"Long, long ago the cosmos was in its making. Whether it was but a whirling mass of gas or whatever it was no one can know, but we do know that the worlds and suns and comets and all of the heavenly bodies were flung far out into space. Now, we cannot say that all of these bodies were flung away at the same rate of speed—indeed, we can logically conjecture that there was a vast difference of the speed of the flying objects.

"Anyway, there were many bodies which traveled at a speed vastly different from that of our own solar system. Now—cogitate—if you can. Astral bodies, flying at all speeds throughout the great curvature of space.

"Very well. Now upon earth we knew that if an object traveled at the speed of light it is nonexistent in one direction. However, did we realize that many things *do* travel at the speed of light. That in fact, vast cosmos is traveling at the speed of light, worlds we do not know, planets we have not dreamed of. And because they have no *earthly* dimension in one direction their physical manifestations are not apparent.

"In other words, this world below us is traveling at the speed of light, occupying at the same time the space which is occupied by our planet—by Mars, by Mercury, by our sun. Yet, because it possessed no length at the time of intersection, this world passes through ours—do you understand that?"

"I'm turribly afeard I cain't!"

"Of course I cannot expect you to. But the glory of my discovery! The wonderfulness of it! If only we could again reach earth. My name would be written alongside Fitzgerald, beside Einstein. Oh, Fate! The ingloriousness of my fate!"

"Maybe," drawled the Yankee, "if you'd look down there at those funny dome things stickin' out of the forest you'd be surer than ever that yore fate is acomin'."

He pointed below. A vast number of tiny objects were swarming from the pink-tinted domes below.

"Marvellous!" exclaimed the Professor. "I had an idea that the domes were the abodes of inhabitants of this realm. Ree-markable."

"Oh, yes. Dawgone enlightenin' as you might put it, but how about it if they don't like our presence here?"

"You mean if they are antagonistic?"

"Exactly."

"Hmm. I hadn't thought of that."

The swarm of tiny dots floated swiftly up into the atmosphere nearer to the monoway. As they approached it became obvious that each inhabitant was enclosed in a queer suit of metal. A glass headgear surrounded the head of a man who strangely resembled the large glassy-eyed embryo of a frog. A pair of waving tentacles stretched into the air, from which emanated a greenish light. Two portholes at either side of the metal suit carried a small disk from which shot a white intense beam at various times. It was evident that the fellows had communicated with others of the dome structures for swarms of their fellows soon joined them and congregated about the monoway, their faces peering angrily and curiously into the screen on the side of the monoway.

Suddenly the faces on the screen parted and one who we assumed to be leader stared us angrily in the face.

"Who is within?" I can swear we heard the question, yet we knew no *voice* had spoken.

The Yankee grinned. Professor Carlton smiled.

"Telepathy," he explained swiftly to the Yankee.

Suddenly anger swept the leader's face, and he gestured with his antennae to his fellow inhabitants who swam about the craft. Instantly whitish beams seared the exterior surfaces. The effect was but to heat the atmosphere to a stifling point.

The inhabitants of the other plane seethed about angrily.

"You may notice," said Professor Carlton interestedly. "That the fellows are very small compared

to our earthly stature. Doubtless we would appear as great giants to them, and the exterior of our monoway must appear as an enormous structure to them."

The scene suddenly dimmed. I heard the Englishman behind me curse, the baby whimpered.

"Gad!" shouted the professor. "Look. Look. They are dimming. We are going back into the lower speeds. We have been long enough above the speed of light. See what's happening?"

"No, I don't."

"Why, when we reached the speed of light we had no length. But we had an infinite mass. Our speed, which had been caused by the pull of the sun's gravity, had somewhat reached above 186,000 miles per second. However, having infinite mass, we have been having a tug of war with the sun to see which could pull the other away. But the friction obtained from various objects in this plane which travels above the light speed is slowing us down. We will again enter into our own world."

"Fine!" snorted the Yankee sarcastically. "But we shall still fall into the sun."

"I think not! I think not! Listen—when we fell away from the earth toward the sun we fell in a great curve. Having attained the speed of light we ceased to be, but kept progressing in that curve—on a different plane! No, we ought to be approaching the earth now instead of receding away from it. Do you see? Do you see?"

The Yankee looked doubtful. Then his face lit with a grin.

"Purty good," he complimented. "Purty good."

Suddenly all within the monoway was running, bustling. The Englishman brushed by me and sprang for the throat of the professor, the song of the "Jolly Roger" upon his lips. Lon Hankins, the Yankee, squatted suddenly on his haunches and grinned, his face splitting in a great yawn of delight, whereupon he began to howl like a coyote. The professor, pinned beneath the crazed Englishman, was saying the nursery rhyme of "Humpty Dumpty" backwards. The young woman with the babe sprang past me, her babe clinging to her undone hair and dragging over the floor behind her while the infant gurgled with delight. An alarm clock swung by my head and bounced from the young lady's head. I knew the clerical looking man had thrown it.

Stretching to my full height I reached over and tore a seat from the monoway, swinging it about my head before I crashed it into the lights!

"Fish!" I yelled. "F-I-S-H!"

They brought me to in the hospital as I was struggling on that morning of May, 1940. I stared up into the sympathetic faces of the attending doctor and his nurses.

"Why—where am I? Where am I?"

"Quiet. Quiet, my dear fellow. Now go back to sleep. You were on a street-car which was held up by bandits and zero gas was thrown in your face. It almost got you. Its effects are ofttimes very strange, producing weird hallucinations. Now, off with you, back to sleep, my young fellow. Back to sleep!"

THE END.

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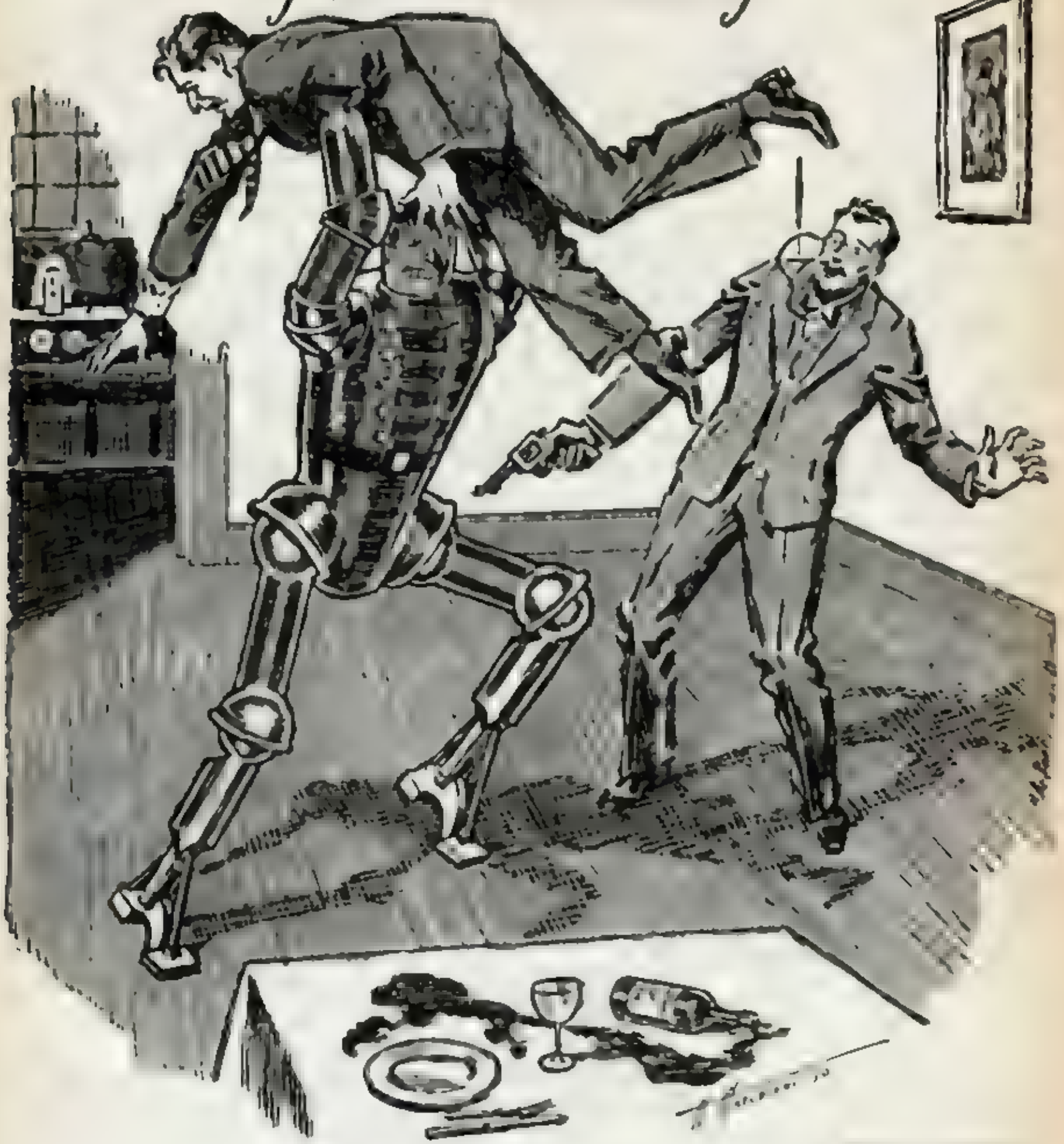
ON SALE AT ALL NEWSSTANDS SEPTEMBER 15th

The Man Who Laughs

by Norman J. Bonney



(Illustrated by Marchand)

A quarter ton of machinery was running amuck! Crawford, screaming terribly, was lifted high overhead and rushed to the nearest wall.

THE machine, despite the smile on its painted face, was hideously ugly. Yet Menley—whose creature it was—rubbed his hands in satisfaction as he surveyed the result of his labor. A year's work had gone into the building of this, his latest invention, a year of innumerable difficulties and disappointments. But now all was forgotten; the masterpiece was finished. Menley stepped back to admire his handiwork.

The man—it could as easily be called beast—stood in Menley's workshop surrounded by a clutter of wheels and wires that were only counterparts of countless cogs and springs that had gone into the making of the thing. It was of average height but badly proportioned. The shoulders were too broad, the waist too narrow. The legs were long, the arms short. These matters would have been disturbing to a sculptor or an artist. But Menley was neither. He was an inventor and if the machine worked he would be satisfied.

NORMAN J. BONNEY

The man was in livery. That is, Menley had intended that it should appear so and to that effect had painted upon the creature's torso a coat of brilliant scarlet. Gilt frogs—also painted—linked a double row of gilded buttons that stretched from throat to waist line. The buttons were real, utilitarian even more than ornamental. A black belt circled the waist, and from hip to knee the legs were scarlet.

The effect of the painted garments was startling. A scarecrow garbed in cast-off clothing resembles, to a certain extent at least, a human being. But Menley's mechanical man could never have been mistaken for a creature of flesh and blood. It was a monstrous deformity.

The peremptory ringing of an electric bell roused Menley from the study of his creation. The ring was familiar. Only one man summoned Menley in that imperious manner. The inventor's face wore a twisted smile as he crossed the floor to the vestibule and opened the outer door.

On the threshold stood the man whom the inventor was expecting. It was Cameron Crawford, entrepreneur, business man extraordinary, captain of industry. It was said of Crawford that he owned Menley body and soul. His manner toward the inventor proved that he at least believed the statement.

"Is it finished?" he asked, making no attempt to conceal his eagerness.

Menley nodded and stood back from the door. Crawford entered hastily. For a year he had left the inventor alone, giving him full scope to work on his invention, supplying without question the money Menley demanded from time to time to carry on the task. A lifetime's successful exploitation of Menley's inventions had given him full confidence in the inventor's genius. He crossed the vestibule with that masterful stride that always distinguished him and paused at the threshold of the door to the workshop. His lips curled in proleptic satisfaction.

But at sight of the red monstrosity within, his jaunty air deserted him. He drooped noticeably. Menley, standing behind him, cringed almost as if expecting a blow. The big man whirled on him savagely.

"What the hell is it?" he cried, his reddish hair almost standing on end.

Menley rubbed his hands. Some of the pigment with which he had painted the creature still stained them.

"It's a robot," he said. "A mechanical man. Don't condemn it until you've seen it work," he begged. "It's better than it looks."

"It would have to be!" snarled Crawford. He was insanely angry. He had hoped for big things, a masterpiece even. Menley's inventions had always been gold mines. But this device, this iron mannikin, he saw at once was impractical. He could not conceive of it as possible of producing revenue.

But Menley was ignoring his show of temper. He had stepped closer to his iron man and now pushed one of the gilded buttons that were seemingly a part of the creature's brilliant uniform. A soft whirring sound filled the workshop. The man began instantly to walk.

Despite his anger, Crawford was interested. The creature moved in a slow and peculiar gait directly toward an open door that led from the workshop to Menley's living room. The inventor followed close in the footsteps of his invention. At the threshold there was a slight hitch. The robot found difficulty in negotiating the step. Menley put out a hand to steady it.

"It's a little top-heavy," he apologized. "I must make the feet broader."

Crawford's lip curled in scorn but he controlled his tongue. The mechanical man came to a stop three paces beyond the living room door. The whirring sound ceased.

THIS intriguing story is by a newcomer to the ranks of science fiction. Mr. Bonney has shown a new use for the scientific invention, and he has built about it a story intensely human—one whose motive we can all understand. The desire for revenge is all too common, even among the most intelligent and cultivated of us: and at moments we lose all our centuries of civilization and sink again to the level of the brute. However there is a wider implication in this story. It is a notorious fact that inventors are often the victims of unscrupulous capitalists, when they try to reap some of the material rewards of their inventions. It happens too many times that men who have contributed the most astonishing inventions to humanity go to their graves as paupers while others become fabulously wealthy from the rewards of these inventions. Our author has his own way of dealing with that problem.

Impractical!

BY this time Crawford had regained control of his temper. No use to quarrel with Menley. He knew that the inventor was sensitive. There was such a thing as killing the goose that lays the golden eggs. After all the old freak had made few failures. Perhaps even this thing might not be as unprofitable as it looked.

"What next?" he asked in his friendliest fashion.

Menley pointed to a table where there was a cloth laid and plates and glasses set for two.

"I had thought to make him a major-domo, a sort of mechanical butler," explained the inventor in his weak apologetic voice. "But of course I can make changes that will fit him for almost any kind of domestic service."

"We can discuss that later. Go on with the demonstration. Put him through his paces."

As he spoke, Crawford seated himself in the chair facing the invention. Menley seemed to be desirous of adding a further word but Crawford's resigned manner kept him silent. He bit his lower lip and without speaking turned and pressed the second button on the left side of the mannikin's breast. Again the low whirring sound was heard, and slowly, yet with the utmost precision, the creature turned about, walked three steps to the cabinet that stood against the wall behind the inventor and there stretched out its gloved right hand, the long jointed fingers of which closed firmly on the neck of a tall bottle. It then turned, walked straight to Crawford's elbow and paused at his side. Uncannily, its hand, still holding the bottle, stretched out and poured a tumblerful of wine over the white napery of the table. To avoid the deluge Crawford thrust his chair back and leaped to his feet.

"What the——" he began savagely.

"You moved your glass!" cried the little man frantically. "With your elbow when you sat down. How could you expect him to know it. He has no eyes. He poured where the glass should have been. Only for your elbow—"

"Aw, shut up!" snarled Crawford. He had seen enough. The thing was utterly absurd. Its market value was nil. Menley's feelings could be damned for all he cared. The old fool had pulled a boner this time and he might as well be told of it. A year of wasted work, not to mention the money the thing had cost.

The whirring sound inside the mechanical man had stopped. The creature itself was standing passively beside Crawford's chair. Its painted smile maddened him.

"How much do you think I've spent on this monkey business?" he howled. "Twenty-five thousand dollars! Twenty——"

"It weighs five hundred pounds," interrupted Menley.

"What of it?" raged Crawford. "Fifty dollars a pound is big money for a piece of junk!"

"But this is no junk. It works. It—"

"It is junk. No one would buy it on a bet."

"You haven't seen what it can do yet."

"I've seen enough. Why, they had one of these dummies at the radio show and it could give yours cards and spades! No buttons, no buzz! Just give him a command and that's all there was to it. . . ."

"You know Crawford, I've never dabbled in electricity or radio. The mechanical world is my field. Mechanics—"

"I've heard all that before. Don't pour it at me again. Throw this dummy in the lake. It's no good. Make me a mouse-trap or a meat grinder and I'll back you to hell. But this thing!"

His words expressed unutterable scorn.

"But Crawford?" Menley expostulated. "Give me a chance to show it!"

The big man shook away from the inventor's hand which had grasped his coat lapel.

"Show it to the marines!" he snarled. "I'm through!"

He strode toward the door.

"Wait!"

The voice was Menley's. But it was so changed that Crawford scarce recognized it. He turned and all his anger vanished like smoke. Menley stood where he had left him but the hand that a moment before had clutched his coat lapel in supplication, grasped now the butt of an old-fashioned Colt revolver, down the blue barrel of which Crawford found himself looking to a threat of death.

A Worm Turns!

THE business man's face went white. Like all bullies, he was, despite his bluster, a coward at heart. He could not face Menley's pistol without fear. There was, moreover, a light in Menley's eye that he had never seen before. People had told him that the inventor had a queer streak. Personally he had never noticed it. But men of genius were notoriously prone to madness. Perhaps old Menley had suddenly gone cuckoo!

This thought in connection with the pistol was none too pleasant. Crawford's face was a sickly yellow.

"What-what's the matter, old man?" he stammered. "Why the cannon?"

"Sit down!" ordered Menley.

There was a noticeable weakness about Crawford's knees. They had suddenly developed a tendency to buckle under his weight and he fell rather than sat in the indicated chair.

The pistol in Menley's hand transformed in the twinkling of an eye the relationships between the two men. The docile inventor had become the dominant figure. His pale face was fixed in a look of determination. His dark eyes glittered with a light almost fanatical. Crawford shrunk into himself. He seemed somehow to have grown physically smaller. He had begun to cringe.

Menley's voice, in tones of authority, continued.

"Are you ready now for a demonstration?"

Crawford nodded and licked his dry lips. He tried to speak carelessly.

"Why sure, old man," he said. "I didn't realize you were so set on it. Go ahead. Maybe I can do something with the thing after all."

"You're lying, Crawford. You say that to placate me. You know there's no market for an invention of this sort. I know it too. But just the same there are a few original features about my man that I particularly want you to see."

Menley spoke in slowly articulated words in a voice

so icily cold that Crawford's flesh crept. He stirred uneasily in his chair. Menley continued:

"For twenty years I've slaved for you, Crawford," he said. "And what have you given me in return? Abuse—nothing but abuse. Oh, you've fed me and clothed me and housed me. You've even given me money for experiments. But you've kept the lion's share of my earnings for yourself. I've made you a millionaire twice over, whereas I, if I were to die at this moment, would fill a pauper's grave."

"Never, old man! I'd see—"

"Oh, you'd probably bury me all right, give me a monument and all that. But that's not what I mean. I'd die penniless. And there'd be nothing to perpetuate my memory. My inventions, my motor, my shoe machines, my textile improvements all bear your name. You've exploited me for your own profit. I'm your slave, your chattel, a creature as much yours as this robot here is mine. You—"

"But you've never said that you wanted the glory. You've been happy in your laboratory. What's got into you, anyway?"

Some of the color was coming back into Crawford's face and with it came some of his accustomed bluster.

Menley shook his head sorrowfully.

"You can neither bluff nor bully me any longer," he said. "You're an octopus that has been slowly strangling me all these years. If you had left me to myself—"

"I did on this last thing and look what you've done! The maddest piece of junk—"

"Don't say it, Crawford. Remember, there's more to be shown. You may change your mind yet."

The words were quiet, slow-spoken. The pistol muzzle that emphasized them never moved a handbreadth as Menley spoke. Again a chill of fear clutched at Crawford's heart. With clumsy cunning he attempted a smile, relapsing again into docility.

"I'll tell you," he said. "We'll call this last one 'The Menley Man,' or better yet, 'The Menley Mechanical Man.' The name's alliterative, has a kind of a swing to it. It might catch on. . . ."

His voice died in his throat. Menley was smiling sardonically.

"I used to believe you when you talked like that," he said. "But you've disappointed me too many times. Stand up!"

Crawford's legs were trembling again, but despite their weakness he succeeded in rising.

The Man Who Laughs

MENLEY had approached his man and touched a third button. The whirring began again. The creature extended its right hand toward Crawford, fingers straight, thumb lifted.

"He wishes to shake hands," said Menley.

Reluctantly Crawford accepted the offered fingers. They closed gently about his own. The glove that covered them was of a soft material, not unpleasant to the touch.

"That's the way you met me," said Menley. "A simple introduction. A clasping of hands in a casual way. But once your fingers touched mine, they hung on. They never let go. Like—"

Crawford's scream interrupted him. The hand that held his had contracted suddenly, crushing his fingers in a relentless grip.

"What the hell!" howled Crawford.

Menley's voice continued, even-toned, but with a determined ring in it as remorseless as the word of doom.

"Like the octopus I spoke of before, once you had me in your hands you surrounded me with the tentacles of your power. . . ."

Uncannily, as Menley spoke, his creature's left hand stretched out toward Crawford, who screamed and tried to draw away. But the right hand pulled him nearer and the left arm encircled his waist, dragging him into a close embrace. Crying now with fear, Crawford began to rain blows with his free left hand upon the creature's smiling face. But beneath the smile was an iron surface and in an instant Crawford's broken knuckles were streaming with his own blood.

Menley's voice continued:

"When I objected, when I struggled, you crushed me. . . ."

The arm about Crawford's waist contracted. Beads of sweat began to form on the victim's brow.

"My own ideas," said Menley, "my own plans, my inventive genius you strangled. . . ."

Again the creature's arm tightened, bringing a horrid cry from between Crawford's lips.

"For God's sake!" he moaned. "Make him let me go!"

Menley shook his head.

"When I begged for freedom, you laughed at me, told me you were making me rich, famous. . . ."

"I will yet," pleaded Crawford. "Only let me go and I'll—"

"It's too late," said Menley. "You've had a thousand chances and you've turned them all down. Now you suffer as I suffered. I want you to know—"

He broke off suddenly. Crawford, desperate with fear, had formed a sudden resolution. His left arm and hand were free. That bright row of buttons on the creature's breast controlled his actions. Without thought of consequences, Crawford began deliberately to push them, one after another.

"Don't do that!" screamed Menley, leaping forward. But he was too late. Crawford's action had brought instantaneous result. The whirring sound became a grinding of machinery at cross purposes. The creature, still clutching Crawford to its breast, began a frenzied but ponderous dance, a quarter-ton of machinery running amuck.

Crawford, screaming terribly, was lifted high overhead. Borne thus, he was rushed to the nearest wall, against which the creature, without loosing his hold, dashed him with frightful force. The whole house shook.

Rebounding from the impact, the automaton began to run clumsily toward the open door. Menley tried to bar the way. He was only partially successful. The creature, with Crawford still in its arms, struck the door jamb a glancing blow, whirled and fell upon the wall cabinet, sweeping bottles and glasses together with itself and Crawford to a shattering heap upon

(*Concluded on page* 465)

The War Lord of Venus

By FRANK J. BRIDGE

What Has Gone Before

Four scientists, Kenneth Marx, an American; Ludwig Von Kressen, a German; Raoul Parri, a Frenchman, and Dr. Wilbur Throck, an Englishman, travel to Venus on Von Kressen's ship, THE FLYING DUTCHMAN. The ship operates by using the power of light to exert pressure and concentrating this power enormously.

Arrived on Venus they find it to be in the same stage of evolution as the earth was fifty million years ago. It is composed of dense jungles and inhabited by the dinosaur, pterodactyl and other creatures common to the earth during its early history. On an expedition Throck is wounded by a spear-like rock thrown by some unknown assailant, believed to be similar to a low type of human.

One day Parri goes on a trip alone and does not return. Kressen and Marx (who tells the story in the first person) go searching for the missing man. They get on the trail of some barefoot two-legged beings who were evidently carrying Parri's body. They are finally attacked by a band of men resembling the Cro-Magnon men of the early human race and taken to their headquarters. They are presented to Deena, their cave princess, who taking a liking to Marx teaches them the language and finally offers to admit both men to their tribe.

Deena is kidnapped and Marx follows the kidnappers and helps to rescue her. He finally accepts her offer to become a member of the tribe.

The stone bludgeon — slipped and fell from his nerveless fingers . . . Charging were nine warriors . . .

CHAPTER VII

The Abduction of Deena

OVER two hundred people were congregated in the throne-chamber of Deena, Cave Princess of Venus. On the stone floor of the room burned three fires, and over each were placed two guards. Sitting straight and majestic on her throne was the Cave Princess herself, guarded by twenty tall, brawny, lithe-bodied naked warriors. Nogas, the Witch Doctor, was conversing with her in low tones, carrying his "magical" paraphernalia in a small bearskin bag. Ludwig Von Kressen leaned against the wall of the cavern, accompanied by Nogas' two daughters. And I, Kenneth Marx, stood uneasily at one end of the oval cave.

Presently Nogas' palaver with Deena ceased, and he came to the central fire. Here he opened his bearskin bag and removed a bundle of sticks, a clay jar, some dry leaves, and a variety of colored pebbles. Over these he muttered his usual incantations, and placing the dry leaves on the fire, invoked the aid of further devils, or gods, or whoever the officiating spirits may have been. I never found out. Then he built several designs upon the cavern floor with the painted pebbles. Reaching once more into his bag, he drew out the tail of an aurochs, dipped it into the thick, reddish fluid contents of the clay jar, and sprinkled the stuff liberally over the congregation and the chamber.

Then Vaga, who was standing beside me, but a little to my rear, nudged me and I moved slowly forward toward the Witch Doctor, following instructions I had received that afternoon. Everyone stood about in awed and reverent silence, but I personally was too busy trying to remember what to do at the right time, and so I am afraid that the ecclesiastical portent of the ceremony was to some extent lost on me. I have gone through various rites in my own Church on Earth, and I recall that on few occasions was I as devout as I should have been, due to the fact that I was always busy remembering what to do next.

When I had reached the Thayo-Maguri, he dipped a feather into the reddish liquid in his jar and with it proceeded to paint all manner of maze-like designs on my face and bared chest.

Now there was a movement in the assembled crowd, and a dozen lithe, lean warriors in full martial regalia stepped into the ruddy glow of the firelight. From somewhere in the darker nooks of the cave came the slow, measured, almost inaudibly low throbbing of a primitive drum, to the cadence of which the young men swayed and stepped, the rills and ridges of their great muscles rippling, rising, falling, and disappearing in the flickering firelight. They came in erect, and with the rhythmic swaying of their bodies, perfectly typified the glorious freedom which they enjoyed. Gradually the drum beats became louder and more frequent, falling at intervals into low, sinister tones, then loudening again. As the drum, so the dancers. The louder the drum beats, the higher they stepped, faces upturned, weapons grasped in either hand; till a sudden drop or fading away of the beats, when they crouched like lions on the hunt—eyes wide open, nostrils quivering, muscles moving swiftly and gracefully with each silent step.

Again the beats swelled in volume and frequency, and the dancers slowly straightened, lifting their weap-

Illustrated by Marchioni

oned hands toward the rocky roof of the cavern, their bare (or sandaled) feet rising higher and coming down again with a soft, almost inaudible pad, pad, pad. Then there came a new sound into the otherwise silent chamber—the clear, though now low and soft, whistle of a flute. I noticed at once that the player of that instrument possessed extraordinary musical ability and talent, fully equalling any flute-player I had ever heard on Earth.

As the notes of the flute became quicker and higher the twelve young male dancers circled the fire more swiftly, till with two or three drums rattling like machine guns and the flute whistling out a cavalry-charge resembling in a way the last bars of the "Raymond Overture," they were leaping like dervishes about the fire; lithe, muscular bodies springing lightly into the air, twisting, whirling—each turn and ripple of the steel sinews beneath their glistening skins beautifully displaying every warlike emotion that swelled and rioted in their savage breasts.

Truly it was a dance *of* warriors, *for* warriors, and *by* warriors; and that wild, weird scene seemed to have

an almost coldly-calculated effect in arousing the primitive battle-thrill in even the most phlegmatic. Just to witness that strange dance made queer thrills race up my spine, and made my scalp tingle and twitch in that remarkable manner that is beyond description, but which you, my esteemed reader, have often experienced yourself.

Then they parted into two lines, with the fire between them, and facing each other the two lines charged —met—and the dance ended with a warrior of each line frozen into the immovability of a bronze statue, his upraised right hand gripping a war-spear that crossed that of the man opposing him. At the same time the music ceased with what a musician might term a "crashing crescendo."

After this ceremonial dance Deena rose—tall, straight, beautiful, stately in her barbaric attire—and came toward me, while I advanced toward her. When a yard separated us, in accordance with the tuition I had received that day, I sank to one knee before her; while she stopped, placed one hand on my shoulder, and said, "The ruling spirits of Karna have looked well upon you, Kenneth, and as you have passed the tests that they have prescribed, it is in their names that I take you into the tribe of Karna as a full-grown and fully-privileged warrior, to defend the people and the rulers and the honor of the gods of Karna, and to uphold the ideals which they represent.

"Arise, my warrior!"

"My warrior!" Her words startled me. Where I had at first intended joining the tribe to insure my well-being on Venus, I now beheld my action in quite a different light. Yes! I told myself as I rose eagerly to my feet, I was *her* warrior! To fight for her, to work for her, to aid her in attaining impregnable supremacy over all other humans on Venus—what could be more thrilling, noble, inspiring?

THE second installment of this struggle for the domination of unknown Venus brings the contending forces to grips. Our intrepid space travelers have become separated by fortune or fate, and now each of them is engaged in a desperate battle for his very preservation. Many astonishing things are due to occur in this strange world where highly-trained scientists are living together with savages and men hardly higher than the ape!

A Dangerous Encounter

AS I stood before her, gazing into her grey eyes, I realized again and even more acutely, that she really was very beautiful. Were the heart vocal, mine would have drowned the growing whispers in the cave by singing a wordless, but tuneful little ditty entitled "Her Warrior!"

From a courier standing behind her, Deena took a ready spear, bow, quiver of arrows, bone knife, hatchet, and knob-stick, and adjusted these about me in their proper places. Then she placed her finger-tips against my forehead in a sort of benediction, and the ceremony was over.

I, Kenneth Marx, had gone twenty-five thousand years into the past—to that barbaric stage from which my race had so long since risen—and I was proud of it; proud because I was *her warrior*.

Twelve more days had passed. Ludwig, once upon a time Von Kressen, and I were with a party of seven more Cro-Magnon warriors, going out to hunt the aurochs. Von Kressen had joined the tribe a week after myself; and this was the first time we two hunted with our primitive weapons, while two of the Karnans were armed with our rifles, which, living up to our promise, we had shown several of the principal chieftains how to use.

We had penetrated about a mile into the forest, going toward a water-hole frequented by the shaggy bulls we sought, when we came suddenly upon a small clearing in the Mesozoic wilderness. In the center of the clearing grazed a small deer whose flesh was the best on the planet, and several of the warriors raised their weapons to bring down the little buck when Gorga, the leader of the party, held up one hand and signed that I should attempt the deer's slaying. As I silently stepped forward I took down my bow and three arrows, fitting one in the bow and leaving two grasped between the last three fingers of my right hand. With the thumb and the index finger of that hand I drew back the gut-string of the bow, aimed, and let fly. A chorus of applause fell on my ears as the strong wooden shaft buried itself in the body of the deer, which rolled over without even a quiver—dead.

I went into the clearing to retrieve my kill and my arrow. It was as I was bending over the little buck that an unpleasant and easily recognizable hiss reached my ears, and jerking up my head I saw just within the clearing, perhaps thirty feet away, a thescelosaurus — ten feet high as it stood on its hind legs—nimble, ugly, and devilish.

His (I think it was a he—I wasn't curious enough to make sure) intentions toward me were not just playful, as far as I could judge from the reptilian visage. The creature's maw was open in a sort of heinous grin, and I may say here that the roof of its mouth was white, and not red, as some writers have stated. No, he certainly didn't look pleasant—he eyed me wickedly in a sort of reflective mood. Of course, I argued with myself, perhaps he was really an amicable individual and was minded to let me reach the trees ere making any rash moves. I was almost confident this was the case as I swung the dead deer to my shoulder and took three steps—about twelve feet—toward my companion in the forest, without his molesting me.

Imagine my embarrassment, therefore, when he suddenly changed his mind and with a rasping screech launched himself toward me, hopping like a kangaroo. Every leap covered ten feet, and in three jumps he had reached the center of the clearing, while I was now crashing into the jungle on the opposite side to that on which he had entered the field. Barely had I entered it than two powerful hands grasped me, one under each armpit, and with my deer I was silently raised into the green maze above. Scarce a leaf rustled as my two companions carried me and my burden twenty-five feet

into the palm-like tree they had chosen for their haven.

Beneath us the thescelosaur, which had reached the jungle, cast about in search of the creature that it had pursued, but it never occurred to the brute to look up. Had he done so, he could easily have plunked himself beneath our tree and awaited our emergence from the encircling fronds. But presently its attention, and likewise our own, was attracted by a sudden crash to our left. Turning our startled eyes toward the sound we were horrified to see, almost at the dinosaur's feet, one of our party scrambling to his feet from the moist ground, to which he had been precipitated by the breaking of a branch that had not been sufficiently substantial to sustain his weight.

Without a sound my two partners shot down toward the ground—one leaping upon the saurian's back, the other to the soft loam beside the great brute, where he jerked a handful of arrows from his quiver and sank them as far as he could into the cold, white, unscaled belly of the reptile.

But the creature gave no thought to the puny things on its back and sides—its interest had been centered on the unfortunate warrior who had fallen from the tree; and its slow-working, minute brain and poorly-developed nervous-system would take several minutes to even recognize the fact that something was on its back.

FRANK J. BRIDGE

It was no doubt this slow functioning of its senses that had enabled me to reach the trees ere it had started well on its pursuit of me; chances are that the sight-impression had taken so long to travel along its optic nerve to the brain and there be built up into a recognizable image, that I was almost in the forest ere it even saw me. I am rather inclined to believe that a dinosaur does not even see shapes at all, but that its eyes record only motion, and that one might be perfectly safe in standing before the very nose of a ferocious titanosaurus or tyrannosaurus, as long as one did not commit the fatal indiscretion of making a perceptible motion.

The idea that sight-sensations take several seconds to travel along a saurian's optic nerve was rather borne out in this case; for the moment our unfortunate companion had struck the ground, the dinosaur gave no motion to indicate that it had immediately sensed the man's presence. Only after he had regained his feet and put several yards between him and the great brute did the creature move—and then with a great bound it leaped toward the poor man and sank the cruel talons of its powerful hind leg into his back. Then with a swift downward stroke it completely disemboweled the ill-fated hunter.

Ugh! But the sight was disgusting—nauseating. In the course of my thirty-five years of existence I had witnessed death in many forms; but though I had considered it gruesome enough to see a school-boy's brains gush from his head when he had fallen beneath the wheels of a great machine, never did I witness such a sickening sight as this savage presented with his organs and entrails torn and splattered over a hundred square feet of the damp, wormy soil.

Kidnapped!

I TURNED my face away and espied the Skipper sitting on a limb; white-faced, sick, and trembling at the unsightly thing below. The others of our party had also evacuated the trees and jumped to the ground, where they rushed in recklessly to the reptile's unprotected belly, into which they rammed spears, arrows, knives, hatchets, and anything else that could cut—some of them even sinking their powerful teeth into the cold flesh of the thescelosaur.

Presently the warrior on the brute's back brought down his hatchet in a terrific blow at the nape of the beast's neck, snapping the spinal column at that point. In its death-throes the saurian lashed two more of our party who had come too close to that mighty tail. One of them was hurled with a crushed chest and broken back against a tree, where he died after a few spasmodic movements; the other had all his vital organs torn and jarred apart within him, and after several minutes died of an awful internal hemorrhage.

It was a cheerless, nervous company that wended its silent way back toward the cave-village, with the last two of the dead men carried on the shoulders of two others of the party, and with my deer as its only trophy.

We reached the village without further incident; though take it from me, our encounter with the dinosaur was amply sufficient to satisfy my adventurous cravings for some time to come.

I carried my deer to Deena's cave, for it was custom that all game killed should be eaten by the entire community in the central clearing of the village, the spoils of the hunt remaining till then in the ruler's cavern. I entered the throneroom and saw that for once the guardsmen were absent. Deena's chair was vacant, though I recognized her voice coming down the corridor terminating at the bearskin hanging behind the throne. She was speaking to another woman, whom I guessed to be her handmaid, and as the latter's replying tones stopped there came a thud, a queer scuffling noise, and a muffled cry. Then several deep, masculine tones. Like a flash I pictured Torag kidnaping Deena again—and without a word I dropped my deer and dived behind the bearskin curtain. The corridor behind was slightly winding, about forty feet long, and illuminated at every turn with the phosphorescent fungus. Suddenly I burst into the first chamber—apparently a sort of parlor, rough-walled and having a single exit opposite the end of the corridor, and in this doorway stood the primitive maid, who seemingly took me for one of her mistress' abductors, and with a shriek launched herself upon me as that tiger had done, clutching a jagged stone knife in her strong hand.

But ere she could strike I had seized her wrist and

bent it away from me.

"Don't fight! I am here to help the Princess! The Princess! Where is she—which way did she go?" I demanded.

The girl shook her head. "They went not out this way," she stated, jerking her thumb toward the doorway she had just vacated.

"And they went not to the throneroom," I added, "So they must have gone some other way."

I sent her to the village to fetch warriors that we might go out in force and recover Deena, and while awaiting them I stood in the chamber casting about for an explanation of where the fair ruler and her abductors had disappeared to.

It was as I stood uncertain and chafing at the delay that a draft of cold air struck the top of my head. Jerking up my face I scanned the roof of the chamber. It was very rough, and the jutting ridges of rock cast the greater part of the ceiling into dense shadow. But at length I perceived a slightly deeper shadow, nearly circular, within the others, and from it the cold air seemed to emanate. I took a short run and leaped upward, extending my hands as far above my head as I could, and felt my fingers close over the lips of an aperture in the rock. Drawing myself up into the shadow I found that it was really, as I had thought, a hole in the ceiling, from which Torag, if he it was, had leaped down and carried off Deena. I drew myself into the low gallery that terminated at this aperture, and on hands and knees began following its gradual upward slope. Suddenly the draft of air ceased, as though a door at the further end of the passage had been closed. The passage was short, and in another minute I came to its end. A little pressure on the walls revealed that its mouth was closed by a movable boulder; I placed my shoulder to it and it rolled away from me, leaving a crevice some two feet wide and three feet long through which I could worm my body.

Just as I emerged, finding myself on the outer slope of the cliff in which most of the caves were, I beheld scarcely fifty feet away a party of six brawny warriors, one of whom carried the gagged, though violently struggling Deena. Barely had I come from the passage than one of the fellows turned and saw me. With a low cry to his companions he hurled his heavy knob-stick at my head, several of the others doing likewise. The sticks I dodged, but as my head came up again after ducking a particularly murderous-appearing missile, it was brought into painful contact with some other heavy object that felled me and after a brief period of dizziness completely deleted consciousness.

CHAPTER VIII

Futile Searching

I LAY in stygian darkness and tomb-like silence when my senses slowly returned to me. Where was I? For a time I could not grasp what had happened, and I sat in the cool, damp darkness, endeavoring to recall what had occurred, and running my fingers lightly over a ragged gash on my forhead, covered now with sticky, clotted blood. At length I remembered—Deena's muffled cry, my race through the corridor connecting her primordial suite to the throne-chamber, my subsequent encounter with the Princess' handmaid, my pursuit of the abductors through the dark passage above Deena's caves, and my last glimpse of them ere the heavy object sent me into oblivion.

Shakily I rose to my feet. The rocky character of the floor upon which I had lain indicated that I was now within the gallery over the apartments of the fair Karnan ruler, so I followed downward the gentle slope of the passage and presently came to the hole opening into the "parlor" of Deena's chambers. Through this I dropped with a light thud to the floor, finding the room empty. Retracing my steps to the throne-chamber I found there quite a concourse of Karnan warriors, who immediately upon spotting me swarmed over me with demands as to their ruler's whereabouts, threats to kill me if I did not lead them to her, and sundry other things of a similar nature. Apparently they still held a certain amount of distrust for me, seeing that I had been in the tribe for such a short time, and were inclined to indict me if anything went wrong with the general run of occurrences in the tribe.

"Warriors," I cried, lifting my hand to enjoin silence, "I have not harmed the Princess Deena—I have but just come from where I was felled by one of her abductors. There were six of them, and though I did not see his face, it seems to me that their leader was Torag, who once before attempted this same thing."

"Which way went they?" came the cry from the throats of the assembly.

"This way." I jerked my head to the passage leading from the room. "Come, eight of you follow me. They cannot be far ahead of us," and grasping my knife and knob-stick I led the way into the gallery, the others crowding after me.

In the chamber from which Deena had been stolen I collected eight strong followers—Nogas, the Witch Doctor, Vaga, Togo, and five others.

Again I leaped upward toward the hole in the ceiling, but owing to my weakened condition, fell short of it. But by climbing to the shoulders of the men I once more entered the gallery, and in a few minutes the entire party crouched in the low-ceilinged corridor.

We worked to the outer end and found the boulder closing the mouth of the passage, but when we attempted to push it away we discovered to our chagrin that it had been well propped and barred against us from the outside.

I was nearly beside myself with anger as we retraced our steps to the throneroom, after several vain attempts to budge the rock barring our progress. It was certain that I had lost anywhere from fiften to thirty minutes while I lay unconscious in the passage where Deena's abductors had thrown me; to reach the place again with my party had required some five minutes more; and now to make our way to the village would take another five minutes; let alone the half hour it would take for us to scale the face of the cliff and continue down the outer flank till we struck their trail.

Emerging once more before Deena's throneroom, we nine began the arduous labor of scaling the steep cliff whose bowels contained the dwellings of the Troglodytes. As I had surmised, some twenty minutes or so

were passed ere we topped the summit of the low, but steep precipice, and descended the more sloping rear till we came to the outer end of the gallery, where my encounter with Torag's party had taken place.

From here the trail of the abductors was quite plain, leading down the slope to the primeval forest that ran into the marshy valley below. We set out in their footsteps, moving at a swift trot that did not greatly tire one, while Vaga, who was excellent at trail-reading, led the way.

I had figured that at our present pace we would overhaul Torag and his henchmen in an hour or so, but my hopes were slowly yet surely dissipated as the Venusian afternoon dragged by and the sky assumed the coppery tinge of twilight.

We were a fagged, cheerless party that at length sought the hospitality of a great rock in the gloom of the forest, when our tired muscles almost audibly expressed their protests at the gruelling strain of our efforts to overtake the fleeing party before us.

Scarce had we huddled ourselves against the rock and started a poor excuse for a fire, when the nightly rain began to drop upon us. Great, warm, slow drops they were, to increase gradually and steadily in frequency, and slowly decrease in temperature.

Our fire was a small, smoky affair, and did practically nothing to keep us warm or dry; but the dense smoke it produced at least afforded a means of protection from the hosts of buzzing, humming, singing nocturnal insects that hungered for our life blood.

At length the dark, rainy night passed, and we, after partaking of a couple of rodents one of our men killed, set forth again into the glowering jungle, while above a drab, cloud-overcast sky scowled down upon us.

However, the clouds were slowly dissipated later in the morning, and the swollen, reddish sun appeared. All that day we pursued the abductors and their prey, most of us being in a cold sweat at the merciless thought of Deena's being in the clutches of those unscrupulous devils who held her.

Battle!

WHEN we again desisted from our pursuit, it was with the poor consolation of knowing that during the two days of following Torag, we had gained about half an hour on him, and that he could not be much more than a mile or so ahead of us. This realization at first spurred a desire on my part to creep on their sleeping camp alone that night and effecting Deena's rescue; but this impulse was quickly quenched when I reflected that with the darkness hiding their trail from my eyes I had no more chance of finding their camp than a blind man has when he searches in the coal bin of a very dark cellar on a moonless midnight for a black cat that isn't there. And anyway, the rain now falling would soon wash away their tracks and I wouldn't have any trail to follow. I may say here that that morning Vaga had found his way to Torag's camp by the various other signs that constitute a trail to the practiced woodsman: tiny bits of torn bark on the trees and bushes that flanked the wake of the fleeing party; dislodged pebbles; trampled grass—signs that were perceptible to me, but which I could not have followed with the speed and accuracy of Vaga, who was a perfect wizard at this craft.

The next day was but a repetition of the previous one, and we had gained approximately another quarter hour on Torag and his five henchmen by the time we once more sought rest in the carboniferous jungle.

And the greater part of the next day it was the same thing, though now we felt certain that ere darkness descended we would overhaul the abductors and their prize. At times when we crossed open glades several hundred yards in width, we caught glimpses of the party we were pursuing, but never did we come sufficiently near to attempt Deena's rescue.

It must have lacked perhaps an hour of nightfall, and we were warily creeping after the party now no more than a few hundred feet ahead of us, when without the slightest warning four wooden arrows sped from the bushes before us.

Nogas, the Witch Doctor, and I were stepping along side by side when the first shaft broke from the underbrush; the Thayo-Maguri halted abruptly, his hands came to his chest, and he slowly sagged down upon the moist earth—a wooden barb transfixing his heart.

To my right lay another of our men, his jugular vein torn out by the heavy arrow that had pierced his neck.

"Scatter!" I shouted, and dropped to the ground, the top of my head just skinned by another enemy dart. My followers had also sprung into the flanking undergrowth, and now we were returning the enemy's fire, though I noticed with some apprehension that Vaga was lying quite still under a fern-plant a little to my rear.

I had drawn some arrows from my quiver, and with my bow in my left hand was lying quietly behind a rotted, maggot-covered stump, from which emanated as foul an odor as it has ever been my ill fortune to encounter.

My eyes were glued to a slightly swaying bush some thirty feet in front of me, but I dared not shoot a bolt at it for in the first place it was uncertain whether or not an enemy lay behind it; secondly, I wouldn't hit him if there were; and thirdly, chances were that one of my own men was behind it.

Some ten feet before me Tago lay prone on the ground, his weapons ready, watching the same bush as I. And suddenly a warrior—one of those we had been pursuing—stepped from the shelter of the bush and let fly at Tago. Simultaneously the twangs of Tago's bow and my own sounded on the humid air; and as our foeman sank to earth, pierced by both arrows, I saw Tago half raise himself on his forearm, pause, and roll over on his back, the befeathered shaft of his enemy protruding from his left eye.

Now the war-barbs of both parties flashed rapidly in both directions—swift flashes that came from the green maze and vanished into the green maze. Twice I saw members of the abducting party topple from their places of concealment, and then my attention was attracted by a movement in the trees above and before me. Looking up I saw another foeman aiming one of his arrows at me. My own bolt sped through the air at the same instant his did; I leaped upward and sideways to escape the murderous shaft whizzing toward me; and then it tore with a burning, searing, rending

pain into my abdomen, while the lifeless body of my antagonist lurched from his limb to the damp soil beneath.

My senses left me then—for how long, I am not certain.

Desperation!

THE rain revived me.

It was night. A terrific thunderstorm lashed the grim, sombre forest about me; the dense black sky above was frequently split by bluish lightning bolts, and the heavy Venusian atmosphere that rushed into the gaps behind the flashes produced thunderclaps that shook the ground itself, and nigh split one's ears in their enormous volume.

My hand crept to my gashed abdomen, one side of which was deeply torn by the arrow, as I slowly and weakly gained my knees. As I crawled away from where I had been lying, every movement of my legs brought the hot pain searing through my racked body. I did not crawl very far, as I subsequently learned, but at that time it seemed to me as if hundreds of miles had passed beneath my wet, scratched knees. After every yard I sank down once more to the loam, shuddering and moaning, presently to rise to my knees again and crawl on.

At length I came to a waterfall, as revealed by a great flash from above, and behind it I had discerned in that brief moment a shallow hollow worn into the rock. My path lighted by frequent lightning flashes, I made my way toward it, and crawling within the hollow, once more lost consciousness.

The following days you can imagine easier than I can describe them. Burning thirst awakened me the next day; racking pain nearly drove me crazy. Periods of utter exhaustion; periods of unconsciousness no doubt broken by periods of delirium. Fever. Thirst. Only the waterfall beside me saved my life. Attacks day and night by the voracious, merciless insects that infest Venus. And through it all the slow recuperation of my torn body.

Of course, under these circumstances it was almost impossible for me to maintain any record of time—I may have lain that way for three days, or I might have lain that way for three months—but I roughly guessed that about two weeks had passed thus, when I finally was able to gain my feet and leave my sanctum. Stiff and sore, I tottered weakly to the site where our battle had taken place.

The bones of the slain contestants had been scattered far and wide by the fierce denizens of the forest that had come to feast on the bodies, and those that remained in the vicinity were covered by worms and ugly slugs and similar vermin.

I wondered if all the men on both sides had been killed except myself. I was certain that at least four of Torag's henchmen had been slain (I was inclined to believe, of course, that Torag was the leader of the abducting band), and I was equally certain that at least four of my own followers had fallen beneath the arrows of our opponents.

Had Deena perhaps also died—from a stray arrow, or by Torag's knife, to thwart us? Or was she still alive, in the clutches of her abductor? Or had she escaped him, and if so, did she still live in the vast, cruel jungle?

These were but a few of the questions that puzzled me as I stood on the ground where our savage encounter had taken place. I did not know whether to try to return to Karna, or to attempt to find Deena—somewhere out in that great primeval forest, with the chances a thousand to one that my quest would end in utter failure. Had I but known whether or not she still lived! And whether or not Torag yet lived! If he was alive, then I believed he would hold her living. If he was dead, then Deena would no doubt return to Karna.

At length, even though I realized the fruitlessness of it, I began a search of the surrounding grounds for a possible clue to the Cave Princess' whereabouts, but no such find rewarded me. Presently the conclusion that I could do nothing forced itself upon me, so I turned my steps toward the caves of Karna, perhaps forty miles away.

Yet something stayed me. It was a foregone conclusion that I could do nothing toward rescuing Deena, if indeed she still lived, when several nights of rain had abolished all traces of a trail, but—

Slowly I turned and reluctantly set out in the general direction which we had followed those four days before the fight.

Followed about two weeks of aimless wandering in the primordial jungle, broken by frequent rests, while the days grew shorter and shorter, the skies constantly more murky and cloud-overcast, and the sun rarely showed his sullen crimson visage through the damp air. For the short Venusian summer on this portion of the planet was swiftly closing, and soon there would come the time when for an entire rotation of the planet the sun would remain beneath the horizon, shining straight down on the South Pole. Then it would creep up slowly over the equator again and the days would once more grow in length.

By this time I was hopelessly lost, for with the sun so low that its scarlet radiance never even rose above the tree-tops, there was no means by which I could judge directions. I cursed myself for an unspeakable fool when I realized that I could not even find my way back to the tribe of Karna.

It was while I was crossing an open plain of perhaps two hundred yards extent each way that I discerned a human figure before me, traveling in the same direction as I, and about a hundred and fifty yards from me. I had just broken from a clump of tall weeds, and now I drew back into their embrace, scrutinizing the stranger before me.

Deena Again!

A WOMAN, I thought, from all appearances. Could it be—?

Cupping my hands around my mouth I stepped into the open again and called:

"DEE-NA!"

The figure turned its head sharply.

I waved my arm and slowly advanced.

The woman raised a spear with which she was

armed and called back:

"Who is it? What would you of Deena?"

"It is I, Kenneth, my Princess!"

Still she did not lower her weapon. In the grey twilight that served as daytime during this part of the year, it was impossible to distinguish features at that distance, and apparently she was taking no chances.

My advance was slow, for my wound still hurt, and I risked no chance of reopening it. She stood under a large tree at the further side of the clearing, patiently awaiting my approach. I was still a hundred yards from her when the low-hanging branches above her head swayed ominously, and suddenly a great, shaggy, manlike body dropped to the ground beside her. A strong, hairy arm encircled her waist, another struck the spear from her hand, and as swiftly as it had appeared the great brute swung back into the tree, carrying the girl with it.

A shout of rage broke from me and I sprang forward, to fall with a groan of pain upon the soil. But I was up again immediately, and as fast as my wounded groin permitted, approached the tree under which she had vanished.

When I arrived no trace of her remained but the spear lying on the ground, which I appropriated, and though I raged and stormed about the neighborhood for half an hour, assailed all the while by nameless fears, I at length had to give up in defeat.

Then I thought I heard a low growl from the jungle to my right. Grasping my knife, which save the spear was my only remaining weapon, I warily approached the sound. A score of yards farther I stopped. Confronting me was a handful of Piltdown men, armed with clubs and the jawbones of the smaller carnivorous dinosaurs. At sight of me they leaped forward, savagely brandishing their weapons, blood-curdling cries upon their bestial lips.

There was nothing else for me to do, so I beat a hasty retreat—that is, as hasty as my wound permitted. Luckily I evaded them after a quarter hour's dodging through the fern-forest, and at last I could no longer hear them in my vicinity.

But one thing I had noticed made a profound impression upon me: tied about the loins of one of them I had seen part of Raoul Parri's trousers. These, then, were members of the tribe that had abducted our unfortunate colleague on that day now some six weeks gone.

Again I found myself thinking of Raoul Parri and his possible fate. Did he still live? If he did, then it was my duty to find and rescue him. And there was Deena to be found and returned to her people; and I would have to bring Parri back to Throck and the *Flying Dutchman*—altogether, it appeared to me that my hands would be full for the next few weeks, to say the least.

The twilight had by now deepened into the copper-tinged Venusian night, and the slow, warm rain was commencing to fall. Seeking refuge from the wet between several large rocks I curled up, hungry and tired, for a few hours' rest.

Anon I dozed, to wake again a little later and still find the rain, now growing colder and falling more swiftly, descending from the scowling sky. The night seemed interminable. I had grown rather accustomed to the long nocturnal periods the last few weeks, but never had a night seemed so long as this one. Several times I crouched awake close to one of my rocks and waited for the dim light of the red Venusian sun to filter through the sullen skies, but no such lightening came, though I knew that many hours had elapsed.

Then it dawned upon me that the planet had reached that point in its orbit when the sun stood exactly over the South Pole, and that my position, a little north of the equator, was passing through a night of some forty-odd hours in length.

At length, after ages of darkness and cold rain, the downpour began to lessen and presently stopped, while a sickly dim light grew upon the dripping jungle about me.

Emerging from my inadequate shelter, I grasped my weapons and fared forth to acquire sustenance, for my fast of at least forty-eight hours had brought my stomach to a point where it fairly jumped up and down within me, while its rumbling demands for food were at times actually audible.

Fortune was with me. Barely had I gone a hundred yards when I heard before me a frightened snort, a hiss, several dull thuds, and then a crunching sound as of strong jaws crushing bone. Stealing forward through the undergrowth I came to a little clearing twenty feet in diameter, and beheld in its center a young allosaur biting through the neck of one of the small four-toed horses that vanished from our planet a million or more years ago.

A Struggle on the Grass

I WONDERED if I would be able to appropriate the young allosaur's kill. I sized up the reptile. He was perhaps five feet tall when standing on his hind legs, and in every way an exact replica of the grown specimens I had several times seen, save that his bony, oval head was considerably larger in proportion to his body than in the adults of the species. Like them, he was shielded with a grey-green scaly armor over his back and sides, while the belly had tough white skin over it.

Leaning my spear against a tree, and taking a firmer grip on my knife, I rushed silently and swiftly toward the young saurian. His back was turned to me, fortunately, and therefore he did not witness my approach.

As I came up behind his shoulder I put my entire weight in back of my own, and striking him low, staggered the scaly devil. At the same time my knife plunged to the hilt into the unprotected belly of the beast—a maneuver which in the saurian's crouching position would have been difficult with the long spear.

The ugly reptilian head swung sharply around, a loud hiss of rage and pain issuing from the creature's lungs. For a moment it seemed too astonished to act; but then as I shouted, leaped into the air, and brought my weapon with a sharp crack across its skull, the brute emitted another great hiss and bounded toward me, leaving its kill lying on the grass in the center of the clearing.

I whooped in glee. Just what I wanted! Jabbing fiercely at the animal's face, I danced away toward the

edge of the forest, the enraged lizard leaping steadily after me and never quite catching me in its taloned forefeet. It really was a desperate venture for me, but I was not inclined to hunt for hours about the jungle for food and then perhaps not get any for my trouble.

Into the forest a little way I led him, then I suddenly dodged to one side; and circling around, silently now, came again to the clearing where the little horse still lay on the wet earth. In a moment it lay over my shoulder, and a little later it was slowly filling my stomach, though in its raw state. For as there was nothing dry at hand, it was impossible to build a fire and cook my meal.

My repast over, I was engaged in a fruitless speculation as to what I should next center my activities upon. The rescuing of Deena was uppermost in my mind, but I was at a loss as to how to perform it. But suddenly the matter was taken from my hands altogether by the appearance of a man in the bush at the foot of the high rock upon which I had consumed my meal. Drawing back from the edge of the rock, I cautiously peered over.

He was of the Cro-Magnon race, and apparently had not seen me as yet, for he gave no indication that he suspected my presence. As I scrutinized him in the dim light that was already waning again, a certain familiarity about him dawned upon me, and suddenly I realized that it was Torag—abductor of Deena; the man whom I had pursued for the last month or so.

Cautiously I crept down the opposite side of my rock from him, and edging around one corner, came up behind him.

"Ah, Torag!"

Like a flash he whirled, his knife out, while he leaped away from me.

My own blade was gripped in my right hand. In the excitement of stealing the young allosaur's kill I had completely forgotten about my spear, nor had I thought of it until this moment. But of course, I couldn't very well ask Torag to wait until I got my spear (which I subsequently found out was originally his own) in order that I might stand a better chance of killing him. And anyway, inasmuch he was armed with only a knife himself, I would not have taken such a great advantage of him. So it was with but my naked blade that I warily crept toward him.

"I am going to kill you, Torag," was my prophecy, "I am going to kill you for stealing Deena, Princess of Karna; for slaying Segoz, the Princess' chieftain; and for every other wrong you did Karna or its ruler."

The man was looking over my shoulders toward the trees behind me, as if he expected to see companions of mine stationed there. Immediately I took advantage of his thought by saying, "You are surrounded, Torag. My warriors are nearby, with their arrows ready to slay you if you try to escape. But you shall have a chance to fight for your life, Torag."

He looked at me a moment, then he crouched and both of us began to circle, snarling like a couple of dogs; each willing to vocally express his prowess, yet neither daring to precipitate an attack.

A few minutes this continued, then Torag suddenly lunged toward me, his knife directed at my heart. I side-stepped, parried his weapon with my own, and then followed several minutes of cuts and thrusts, none of which drew blood on either side. Presently we caught our knives in some manner which released both of them from our hands and sent them spinning in opposite directions upon the grass.

Torag and I rushed each other with our bare hands. We clinched, and at once I realized that my foeman had every advantage. Apparently he had not been wounded in the battle of a few weeks before, and being by nature twice as strong as I—though I may state here without undue egotism that I am not just exactly a physical weakling myself—he was in his unweakened condition crushing the life from me, as he had nearly done on the occasion of my first disagreement with him.

However, by straining myself to the utmost, I managed to break from his hold and retreat for a lungful of air. Then we came together again.

This time I brushed away his arms with my own, and gripped his loin-cloth with my right hand, while my left shot to his throat. I sank back flexing my knees beneath me, drawing Torag upon me. Then I suddenly arose again, keeping my left hand down and extending my right arm, so that I raised the Troglodyte, head down, high into the air. Then with a mighty forward lunge I cast his heavy body from me.

The savage fell upon his head—there was an ugly *snap!* as his neck broke, and Torag was no more.

Weak and exhausted from the exertion of the battle, I sank to the ground for rest. As I did so I felt a light touch on my shoulder. Quickly I looked up—into the face of Deena, Cave Princess of Venus.

"Deena!" I cried, scrambling to my feet, "You?"

"I, Kenneth! I saw how you defeated Torag just now. You are a wonderful warrior, Kenneth, and now that Torag is dead, you by custom inherit his rank."

Here I sank to one knee again while Deena continued, "In accordance with the customs of the tribe of Karna, you, Kenneth, in recognition of your prowess in battle, are hereby declared a chieftain of Karna. Arise, my Chieftain!"

CHAPTER IX

The Story of the Abduction

DURING the following weeks that Deena and I spent in wending our slow, peril-fraught way back to the tribe which she ruled, she taught me much of the art of judging directions on this cloud-hidden planet by observing the plant life in the great, marshy jungle.

For instance, there was a certain red flower—one of the very few that are to be found on the savage planet—which, regardless of how cloudy and rainy the season of the year might be, constantly pointed out the position of the sun: if the great luminary was directly overhead, the flower was open to its fullest extent and faced directly upward; if the sun was on the opposite side of the planet, the blossom was completely folded and drooped downward; if, as on this occasion, the sun was over one of the poles, the bloom leaned toward that pole, and its petals were half open. The degree

of these phenomena varied, of course, with the latitude at which the plant was situated.

Then there was a form of grey moss which grew on the trunks of the more solid trees, and always on that side which was turned toward the sun. For example, at this time of the year the trees at the equator had their southern sides covered with this moss; the trees at the South Pole, if there be trees there, were completely surrounded by the moss; and the trees at the North Pole, provided trees grew in this locality, were absolutely devoid of the moss. Since I never visited either pole, this is of course pure conjecture, but it is rather substantiated by my later observations on how much of a tree's trunk is moss-covered at different times of the Venusian year.

While she was teaching me these things, Deena also related to me how Torag's abduction of her had come about, and what had befallen her since then.

"It was that day when you and Ludwig were first gone out as hunters of the tribe," she began, "and for a while I stayed in the council chamber"—Deena had no word like "throneroom"—"but as my presence there was not required, I dismissed my guard, as I sometimes do, and retired to my own caves. In the first cave I met my handmaid, to whom I gave some instructions concerning the meal I desired that evening. She had gone and I was about to follow her to another cave when suddenly a man dropped from the ceiling, down beside me. Before I knew just what had happened, the warrior placed his hand over my mouth and put his other arm about my waist. Then another warrior who was hanging from the darkness of the cavern roof by his feet, grasped my attacker under the armpits and pulled us both up into a little tunnel above the cave.

"In the darkness I could not see, but I felt that five or six men were there. They did not stop to bind or gag me there, for already we heard the entry of a warrior into the chamber beneath us—a warrior who dispatched my maid for other warriors, and who had a voice, Kenneth, very much like yours."

"It was I," I assured her in response to her questioning glance.

"They did not stop to bind or gag me there," she then went on, "but hurried along the tunnel till they came to the open, where a large stone had been shoved aside. When we emerged, Torag, who was awaiting us, gagged me with a piece of skin, while two others held me and the rest pushed back the rock.

"We had gone only a little way when you came out of the tunnel, as you remember, and then Torag's warriors set upon you. After that heavy rock had knocked you senseless, Torag sent back one warrior to throw you into the tunnel and put the rock in place."

As she paused I asked:

"How is it, I wonder, that Torag's man did not kill me, instead of losing so much time locking me up, only that I might later pursue him?"

"I heard them speak of that among themselves. But Torag and the others believed you already dead, so they decided to hide your body in the tunnel, of which no one else, it seems, had any knowledge. They did this to minimize the chances of any Karnans discovering your body and thereby hitting Torag's trail. That the warrior did not make sure of your death I attribute to the fact that he wore no knife, nor any other weapon.

"Then, to make sure that the boulder would not dislodge and roll out, leaving the tunnel open, they barred and propped it against the gallery's mouth. After that we started into the forest.

"When at length we stopped to eat and rest, Torag put two warriors to guard against the possibility of a pursuit having developed, while he and the others lay down to sleep. I was not molested at any time during those four days that elapsed before you and your party overtook us and fought Torag's warriors.

"During those four days we kept moving steadily, stopping only twice a day for short meals, then continuing again. Finally, that last day one of Torag's men heard your party, so Torag arranged an ambush, leaving me tied to a tree in the jungle.

"For a terribly long time, it seemed to me, I heard the cries of the contending warriors. Then these ceased, and presently Torag came through the forest, and loosing me from the tree, set forth to the south. I struggled with him and managed to grasp his hatchet, with which I hit him over the head. As he sank dazed to the ground, I picked up his spear and fled into the jungle, and never saw a human being again till that day when you found me in the little glade, just before the coming of the Long Night.

"Then, as you recall, the hairy man of the forest carried me off. The great creature held me in one arm, while with the other and his long-toed feet he swung through the lower branches of the trees, almost as silent as a shadow, and agile as the little monkeys. He carried me thus for many hundred spears,* then he came to earth. Scarce had he done so when another of his kind came suddenly from behind a great fern, where he had been hiding, and attacked the one who had abducted me.

"Instantly I was forgotten, for as the two brutes commenced to rend and tear each other with their hands and teeth, I slipped quietly away into the jungle. Whether the two were fighting over me or not I do not know, but neither of them noticed me as I made my escape.

"After fleeing northward for what seemed to me a very long time, I at last sank exhausted to the ground, while the Long Night came upon the forest. I was very glad when the day came again, and rose to search for food. I had just finished eating some berries when I heard the sounds of voices and of a scuffle to my left. Creeping carefully through the jungle I witnessed your encounter with Torag—and here we are."

New Adventures

AT the end of her story, I gave her an account of my own adventures subsequent to her kidnapping by the Cro-Magnon who had been a chieftain of her tribe. Ever since she had come into young womanhood, Deena told me, Torag had sought her hand, but she had never liked him because of his avarice and the

* The unit of linear measurement among Deena's people. A man's war-spear, measuring about six feet, is the standard. —K. M.

excess cruelty he exhibited toward those who were under him. He was fearless in battle, a strong man and a mighty hunter, therefore Deena had in accordance with the unwritten laws of her people made him a chieftain, though she disliked the idea of doing so because she well knew that his importunities for her hand would be only the more frequent and annoying. And at length, seeing that Deena did not desire him in marriage by the customary rites of the tribe, he had abducted her. His companions in his last venture, it appeared, were outcasts, banished from their various villages for violation of the primitive laws.

The next day we made pretty good progress, covering, I should say, some eight miles in the short, damp day; and according to Deena's estimate we should have been some thirty miles south of the Karnan cliffs.

We were stepping carefully through the undergrowth, Deena preceding me, shortly before we intended making camp, when out of the dense verdure before us came the warning hiss of a great dinosaur, followed immediately by the crashing of branches and the emergence of the beast itself from the lush vegetation. The Cave Princess leaped lightly to one side; while I with an alacrity born of my danger-filled life in this savage world whipped three arrows from my quiver and grasped the bow I had constructed, together with my barbs, on the march toward Karna.

Our annoyer was a thescelosaur, standing perhaps six feet on its hind legs, while the length of its body from the tip of its nose to the tip of its tail, measured perhaps thirteen feet. Like all its kind, the brute's back followed a line inclined at an angle of about forty-five degrees to the plane of the soil.

In rapid succession my three shafts sped toward the reptile; the first buried itself deep in the white belly of the thescelosaur, the second in the creature's right eye, and the third hit the saurian's side, bounding harmlessly from the scaly skin.

As the infuriated dinosaur crashed toward me, I retreated slowly before it, leading it away from my fair companion who had silently as a shadow slipped out of harm's way. I drew three more bolts from my quiver as I moved away, and carefully shot them. The first again rebounded harmlessly from the reptile's armored side, the second sank deep into the left eye, and the third penetrated the almost unprotected lower side of the neck, piercing the jugular vein and releasing the lizard's thin, watery blood, which resembled that of a turtle.

I guess it was the arrow in the beast's left eye that did the dirty work. At any rate, after three or four more bounds in my general direction, its tail thrashing wildly, it seemed to lose its sense of equilibrium, and lurching drunkenly about for a while, it presently sank limply to the damp loam, still emitting great hisses and gasping sobs.

The Princess stepped lightly out of the undergrowth at my side. Even if I do say it myself, I might mention that there was a light that somewhat resembled admiration in her eyes as she looked up at me and said:

"You are indeed a great fighter, Kenneth. Rarely indeed is it that one of my warriors slays a *glyth* by himself. That you killed Torag with your bare hands was proof enough of your right to chieftainship, but that you should slay a *glyth* alone—" she shook her head slowly.

Detouring around the still quivering, twitching carcass of the dying reptile, we left the scene of the encounter and continued our way beyond it. A little later we sought shelter under a dense cluster of broad-leafed, fern-like trees. Here we ate the tubers that Deena had collcted on the day's march, and after our repast she curled up in the most sheltered corner of our retreat, while I as usual stretched myself before the largest entrance to our haven and lay awake as long as I dared.

After several hours of rain, I had noticed in the course of the last two months or so, the great carnivora ceased their hunting, especially the mammalia, for the great cats extremely disliked getting wet in the night rain and therefore did their hunting in the dim light just before nightfall. The saurians, of course, were not so discomfited by the rain, but as they filled their immense bellies well in the early hours of the night, they sought their rest during the balance of the nocturnal period. So after guarding our camp for a few hours I was able to go to sleep and still be certain that the chances of our being disturbed were rare.

I woke a little after daybreak, and found Deena laying out our breakfast of berries on broad leaves that served as plates.

"Greetings, my Chieftain!" she called as I turned toward her.

"And to you, my Princess."

She indicated a leaf heaped with black berries, and as I joined her we began our simple breakfast. This important function over, we fared forth again toward the north and Karna.

Half the day passed without incident. Then we broke suddenly through the dense undergrowth upon a great triceratops—a mighty beast measuring seventy feet in length from the tip of its powerful beak to the tip of its beamlike tail. Twelve feet measured the enormous head alone, from the beak to the outermost tip of the bony frill that protected the back of its neck. The two great horns over the small, reptilian eyes were six feet long, and the median horn on the nose was two feet long and six inches in diameter at its base. Its back and sides were covered with slate-grey scales, running into a tough white hide on the dinosaur's under side.

Trapped Again

AN awe-inspiring monster it was—this gorgon out of the past—driving into insignificance the puny little specimens that had flourished on our own earth, scarcely ever more than thirty to thirty-five feet in length, and often no larger than a big hippopotamus or rhinocerous.

The dinosaur for a moment glared stupidly at Deena and me, then with a terrible hiss that emphatically denied the peaceful, herbivorous nature which I had always attributed to its kind, it opened its enormous, pink-white maw as wide as a barn door, lowered its mighty head—a deep, growling rumble coming from its

wild throat—and charged, a stupendous engine of destruction.

Neither Deena nor I lost much time in deciding what was to be done—there was only one thing we could do: flee.

Flee we did. With the foul, sickening breath of that savage demon constantly on the backs of our necks, and the crashing of the ferns and trees in its path sounding in our ears, we ran and ducked and dodged like the small rodents that raced with us from the brainless fury of the mad dragon.

Despite our most valiant efforts, the dinosaur with its comparatively slow, but space-covering steps, was gaining on us with the speed of a twenty-first century express train, the ground shaking and quivering under the impact of the enormous feet.

"To the left, Deena! Dodge!" I shouted, at the same time swerving to my right. She did as I bade, nor were we a moment too soon, for scarce had we turned in opposite directions than those thirty tons of small-brained fury tore by, crashing the trees right and left like so many straws.

I did not stop as soon as I was clear of the reptile's path, but ran for at least another hundred feet into the jungle, for with the great, towering palmetto trees sagging to earth in the wake of the three-horned monster, it would have been decidedly unhealthy to remain in the immediate vicinity.

When the dinosaur had passed I made my way back to the place where Deena and I had separated.

"Deena," I called, somewhat softly.

She did not appear.

"Deena!" I called again, more loudly.

No answer.

"Dee-na!" I bellowed once more.

Still no reply.

With grave misgivings I stepped into the Mesozoic jungle on her trail. For some seventy or eight feet I followed her path, calling her name at intervals. Yet not once did I hear a sound that might have come from her.

Perhaps ninety feet I had penetrated into the jungle when without warning half a score of shaggy, savage brutes rose from the surrounding fern-bushes and leaped toward me.

At once I recognized them as *Eoanthropi*—the long-dead terrestrial Piltdown race, or "dawn men." There were the same low, receding foreheads; flattened noses; receding chins; thick, wide lips; and apish teeth. Heavy mops of black hair hung down over the sides of their hairy, bearded faces. They stood about five and a half feet tall, and each one carried a knife, a club, and a number of stones hung by grass thongs from a grass girdle about his waist. Other clothing or weapons they had none.

They were a fearsome-looking bunch, as with wild cries they sprang toward me, their crude weapons clenched in their hairy, hardened hands. Whipping out my knife I dived at the nearest one. It was clear to me that these half-brutes had captured or killed Deena; therefore it was with utter abandon that I assailed my chosen victim.

Apparently the fellow had not expected me to assume offensive tactics, so ere he quite realized that I was attacking him, my knife (which I had recovered after my fight with Torag) had plunged deep into his savage chest.

Thrice my blade sank into his limp body, then the others swarmed over me, rocks and knives and clubs waving aloft while they pummeled me to earth. I did not lose consciousness, but I was very dizzy for some time as they jerked me up and dragged me through the wilderness.

After some time we overtook another party of some five Piltdown men, two of whom held Deena by the arms as they pulled her roughly through the grim carboniferous jungle.

At sight of those hairy brutes maltreating with such savage ferocity the beautiful ruler of Karna, a red veil seemed to descend like a curtain of blood over my eyes. I voiced a roar of rage and pulled so unexpectedly at my two guardians that the one on my right was sent face down to the dank loam, his grasp on my wrist loosened and broken.

But before I had taken another step toward the party before us, my own captors pounced on me and mercilessly pounded me into insensibility with their brawny fists and knob-sticks.

We were still on the march when I opened my eyes I know not how much later. Within ten minutes or so, however, we debouched upon a grassy field, along the further edge of which ran a low, rocky ridge, indented in three or four places by the black, yawning mouths of caverns.

The Dawn Men

IT soon became apparent that this was the rear of the Dawn Men's cave village, for we crossed over this ridge and descended to a bare earth lane that ran between it and another ridge facing it. Both these ridges were pierced by some twenty cave-mouths, in several of which squatted *Eoanthropi*, the men for the greater part engaged in "flaking" stone implements, while the half dozen females in evidence occupied themselves with the grinding of a wild maize that grew in small patches within the confines of the vast forest. This grinding process was of course merely pounding the maize grains between two rocks. Whether they cooked the grain after it had been pounded I doubt, for as far as I could see, there was not a single fire or sign of one within the village. It is possible that the ground maize was softened in the water with which several nearby hollow rocks were filled, but as I did not actually see this being done, I cannot be certain that it was so.

Our course through the village, which had been aroused by the appearance of ourselves and our captors, was terminated before the low entrance to a cave which I knew to be that of the tribe's chief, for wherever I have been in my wanderings, I have invariably found it customary among savage clans to present prisoners and visitors to their ruler.

Seeing that Deena and I were prisoners, I expected that we would be led within the cave to the feet of the chief, but instead, that worthy individual himself emerged from the recesses of his cavern to give us the

imperial once-over.

This important function completed, he vouchsafed Deena and myself several grunts, barks, and surly growls that from experience I judged to be inquiries concerning our identities and origin.

Deena maintained a haughty silence to his questions, which she and I could not, of course, understand; but I, in consideration of his regal rank, answered him in English, informing him that it was none of his business where we came from or who we were, and wound up with a heartfelt invitation that he betake himself to a certain fiery locality whereto terrestrial men refer all things that jangle on their nerves. All this for the simple purpose of elucidating to His Hairy Majesty the futility of further conversation between us.

My speech served its purpose to all appearances, for after staring at me stupidly for some time following the end of it, the Piltdown King grumbled something at the dozen brutes who guarded my fair ruler and me. At his words four of them grasped Deena roughly by the arms and jerked her away toward one end of the village, while six others seized me and hustled me into a dingy, evil-smelling hole a few doors from the royal apartments. Here I was left in the darkness with two Dawn Men squatting guard at the entrance, each armed with a club and a stone knife.

At nightfall I was favored by the appearance of a lump of raw, half-rotted flesh, smelling bad and tasting worse, which was ungraciously thrown upon the rocky floor of my prison.

But it was the only eatable thing within the cave, so though I gagged and spat a dozen times in the consuming of the small portion that was at all to be swallowed, I at length managed to get the thing down into my stomach, from which strategic position it vigorously proceeded to annoy me during the night by leaping up and down, breaking my slumbers a score of times. Ever since that night I cannot think of Piltdown men without imagining them to be poor, helpless creatures eternally afflicted with stomach and intestinal disorders.

Three days passed. During that time I saw no one save the two guardsmen who squatted before my prison, rarely speaking to each other, and when they did so, voicing but a few low growls. I was fed with either raw flesh or plant roots (which were much more preferable).

I wondered much, in the course of those three days, how Deena fared in the hands of these wild half-brutes; nor can I say that my reflections as to her possible fate were of the most pleasant. To be imprisoned and manhandled was bad enough, but the chances were that she had been killed by the *Eoanthropi*. There was nothing I had seen on my arrival in the village to indicate that they were not of a cannibalistic nature. Quite the contrary; a tall, blood-stained rock set upright in the village "street" seemed to lend color to the hypothesis that these primitive men of the past might have man-eating tendencies. An awful thought struck me. God! What if they had killed Deena and fed me on her flesh? At the bare suggestion I went mad. Without a sound I rushed toward the entrance of my cavern and launched myself at one of the guards, my teeth sinking deep into the back of his hair-clad neck.

Deena's Efforts

A BELLOW of pain burst from the *Eoanthropus* as he jerked his head away, while his companion with a low snarl hurled himself upon me. For many minutes we three rolled and scuffled before the cave, my captors snarling and growling like savage beasts, and I venting all the choice invective in my possession.

Then at last the combined efforts of the two Piltdown men carried me into oblivion.

The entire tribe was congregated about me when I came to not very long afterward, as I could see from the fact that my guards were still bleeding from a few minor wounds, and their nerves and muscles had not yet relaxed from the strain of the encounter, for they still trembled slightly as a result of the exertion. It was the same way with myself. The High Mucky-Muck of the Dawn Men was also there, listening silently to the account of the battle being narrated by my two recent antagonists. When they had finished he glared at me a long moment, then barked something at those about him.

Immediately three of the men grasped my arms and dragged me to the center of the village where the upright rock was set. There they jerked me to my feet and with strong strands of twisted bark-strips bound me fast to the stone post. Utter exhaustion prevented even the raising of my hand.

When I had been securely trussed to the stake, if one can so call it, the savage villagers ranged themselves in a circle around it and began to pat with their palms on the flat soil. The chief still scowled uncompromisingly at me, then at a word from him a youth departed to the royal suite, returning a minute later with a heavy stone cudgel which he delivered into the hands of his ruler.

The Big Mogul raised a hand. The beat of many palms of the ground ceased. Then in a low gutteral voice the king harangued his subjects, jerking his head and thumbs frequently in my direction. His address over, a wave of loud applause swelled from the throats of the motley assemblage, which resumed beating upon the damp loam. The Piltdown king advanced slowly toward me, both hairy hands grasping the stone cudgel. Now he was ten feet away—eight—six—four—two—he stopped.

The club was slowly raised aloft—poised—.

* * * * *

Deena's guards, after the termination of the Piltdown king's interview, hurried her to a low cave at one end of the village. Here she was unceremoniously flung to the floor while two of her hairy captors squatted as jailers before her prison.

For a long time she lay quiet in her cell, then she rose silently to her hands and knees and moved to one corner of the cavern, where she sank back and glared balefully at the two sentries before the entrance.

Presently she became aware that her back rested not against stone, but against a patch of rich loam. Feeling with her fingers, she traced a fissure in the rock wall of her cave, some ten feet long and at one place about

two feet wide.

At the discovery a wild scheme entered her head—wild, and yet the most feasible that might be safely practised. She began searching with her bands in the Stygian darkness of the cave till she found what she wanted—a broad, flat, yet pointed and sharp-edged rock that had splintered from the lips of the earth-filled fissure in the back wall of her prison.

With this crude implement she commenced to slowly, silently, and yet steadily scoop a large hole in the earth at the widest part of the crevice in the rock wall. The dislodged earth she shoved to one side, where she flattened and patted it into a couch that she could utilize during her incarceration, for she knew that many hours—even days, perhaps—would elapse ere her plan was consummated. She hoped only that the Eoanthropi would leave her to her own devices for the ensuing few days.

To her relief, she found that there was no second stone wall behind that of her cave; and after some time of digging, she hopefully surveyed by means of her hands the reward of her efforts. She had scooped out a roughly circular hollow about eighteen inches deep and two feet in diameter. By nightfall the depth had increased to three feet.

The next day she tunneled four feet more into the soil behind her cavern, steadily leading the trend of the tunnel upward.

And the third day she dug another four feet of ground away; then to her immeasurable relief, the last thin wall of earth fell away and the pure air of the outer spaces swept to her nostrils.

It had been her good fortune to be imprisoned in a cave behind which, at a distance of some twelve or thirteen feet, there ran a gully, and this hollow she had dug into. The terminus of her tunnel lay perhaps four feet below the edge of the gully, and had she been required to dig upward this distance by the absence of the little coulee, the digging of her gallery would have taken another week. But by the fortunate presence of the hollow, her efforts had received an early reward.

For a few minutes she breathed the fresh outer air; then she lowered herself down the bank to the floor of the gully, some nine feet below the end of her corridor. Here she paused, listening. No sound, however, except the steady drone of countless insects, the whispering of the lush verdure, or the rolling of distant thunder, disturbed the tranquility of the early twilight.

She cast about for a plan of action. During the digging of her avenue of escape she had never pondered on what she would do when at last she reached the open air—her entire interest was directed upon her engineering feat only. Now she wondered. Should she prowl carefully about the village, endeavor to find out the cave I was incarcerated in, and attempt my release? The project involved a lot of risk, and Deena did not fancy the idea of again losing her freedom when she had just so laboriously gained it. Nor did she feel disposed to abandon me to my fate at the hands of the Piltdown men without doing something toward effecting my rescue.

Finally, however, the happy thought struck her that the best thing she could do was to return to her tribe and there gather sufficient warriors to come back and rescue me. If I were already dead, the expedition would be one of revenge, while if I still lived, it was a ten to one chance that the Dawn Men would suspend all other activities in order to search for her immediately her flight was discovered, and in the two or three days that would elapse I would be perfectly safe, while she would be able to lead her warriors to the cave village of the Eoanthropi.

The decision made, she looked once more about her, and then stole silent as a shadow along the bottom of the little ravine into the sombre darkness of the grim forest.

For an hour she hastened through the heartless jungle, her great intent only to reach the caves of Karna at the earliest possible moment that she might there collect a force of brawny bowmen and return to rescue me. She paused a moment to rest, when suddenly she cocked her head to one side and listened. Somewhere, close behind her, she though she had heard the soft, muffled tread of a bare human foot. Cautiously she edged around the bole of the tree against which she was leaning, and as she did so a rough palm was clapped over her mouth and a huge, hairy arm encircled her waist.

Feeling the hairy hand of her assailant over her opened mouth, Deena sank her teeth as far as possible into the horny palm and closed her jaws.

A grunt of surprise and pain was promptly elicited from her kidnapper, who yanked his hand from her mouth and permitted a single scream to escape her lips. Then he placed his hand around her shapely neck and began to squeeze, till with her senses swimming Deena gave up battling against him and was dragged through the matted jungle back to the cave-village of the Dawn Men and a fate at which she could only guess.

CHAPTER X

A Daring Attack

FOR a minute that seemed an eternity, the stone bludgeon of the King Eoanthropus was poised on high over my head. An awful moment it was, allowing me an appalling realization of my impending fate—a realization that would have been spared me had the king of the Piltdown men avoided that ghastly preliminary pause.

I did not want to die. Thirty-five years is certainly no age for a strong, healthy, well-to-do man to pass into the Great Beyond—especially if said man entertains a certain degree of liking for a very personable young woman, and that, I was forced to secretly admit, was really the cause of my solicitude for Deena, Princess of Karna. Yet in the small, red-rimmed eyes of the Piltdown king I saw the Grim Reaper grinning into my face—tauntingly.

Suddenly the giant muscles of my executioner-to-be tensed; rolled into a thousand hard little ridges and bumps under the shielding hair of his great arms, ready to bring down the lethal weapon in a swing that would crush my head like an eggshell.

What happened next surprised me no less than it did the congregated Dawn Men. The king of the tribe, at the very height of the muscular tension that was to bring the club down in the fatal blow, suddenly jerked queerly, and scarce had he done so than there crashed upon my startled ears the report of a U. S. .30-30 army rifle.

The stone bludgeon slipped and fell from the nerveless fingers of the Eoanthropus, who sagged silently and lifelessly to the feet of the man he would have killed. As he did so I raised my eyes from his dead form and cast them toward the forest beyond the startled Dawn Men before me, and then I raised my voice in a wild whoop of elation.

Charging with savage yells toward us were nine warriors of the Cro-Magnon race; and in him who led them, his grey mane flowing in the breeze while he waved aloft a shining automatic rifle, I recognized Ludwig Von Kressen—the Flying Dutchman.

Over fifty terrestrial years old he was, yet he raced over the grounds of the cave-village with a speed that vied even with that of the fleet young cave-men who accompanied him. Occasionally he checked himself for a brief moment, threw the butt of the rifle to his shoulder, and fired at some Dawn Man. Every time but once his chosen victim sank dead or wounded to the moist earth.

The Eoanthropi were fleeing in all directions to their caves to secure the weapons they had left there, for most of them were inadequately armed toward repulsing an enemy, and evidently believed a large force was attacking them.

A dozen lay already stretched in eternal silence on the ground, slain by the bullets of Von Kressen or transfixed by the slender barbs of Deena's wild warriors. Once I saw a member of the invading force halt suddenly and pitch forward, killed by the pelting-rocks of the Piltdown cave-men. But a score of the brute-men lay dead on the ground in payment.

Then Von Kressen was before me.

One swift look he shot at me, then his head jerked back in astonished recognition. He blanched. Then:

"God! Kenneth! *You!*"

My tongue stuck in my throat. I nodded.

He flung himself toward me and embraced me.

"Just in time!" he sobbed. "Just in time! Oh God! Had I known it was *you!*"

Then he suddenly whipped out his knife and quickly severed the bark strands that pinioned me to the sacrificial rock.

"And the woman—" he barked at me, businesslike again. "Was she Princess Deena? Where is she, man? Quick! We've got to save her before these half-devils find out how small a force is attacking them!"

"It's Deena, all right!" was my rejoinder as I armed myself with the bludgeon that had so nearly written "Finis" to my career. "But I don't know what cave she's in—if she still lives."

"We'll have to search every cave then until we find her, that's all," he said, and turning to the eight remaining warriors he ordered four to each side of the village, each man to search one cave for a sign of the Karnan Princess.

The Piltdown men were emerging from their caverns by this time, armed now with the stones, bludgeons, and knives that comprised their martial necessities. Quick work was urgent, so as the Von started for one side of the cave-village and I for the other we called aloud Deena's name in hopes that she would hear and respond, and thus save us time and men in aiding her release.

Twice I heard the Skipper's' rifle crack, and once I myself downed a troglodyte with my club; then there came a cry from one of our Karnan warriors on the Von's side of the village.

"Here! I have found the Princess Deena!"

Turning, I left the empty cave I had entered, and raced across the central "street" of the hamlet to where our man was waving him arm before the entrance to a cavern. From all points our warriors were running toward him while the dark, hairy brown bodies of the Dawn Men rapidly issued with wild battle-cries from the mouths of the different caverns.

Besieged!

GROOG, the warrior who had discovered Deena's prison, was now having his hands full with the four Piltdown guards who had been stationed within the cavern to prevent any further attempts to escape on the part of the Karnan Princess. The first of these jailers Groog finished with a well-placed arrow; another lurched dead to the soil upon the report of Von Kressen's rifle; and then two other Cro-Magnon invaders fell upon the two remaining Dawn Men, slaying these with their arrows and knives.

By now our entire force had gathered before the entrance to Deena's cave, pressed hard by the yelling devils who swarmed upon us from every portion of the village. For the first dozen shots or so, the reports of Ludwig's gun had scared them; but by this time they were becoming accustomed to the sound, and what with their short tempers and long desires for battle, their fears of the strange weapon were soon overcome; therefore we now found ourselves hemmed in on three sides by the growling, shrieking Eoanthropi.

Von Kressen and two others advancing, we entered the cave, luckily finding it containing no one else than the bound Cave Princess of Karna. The German's knife quickly liberated her from her bonds; then we men returned to defend the entrance, ordering our fair ruler to the most sheltered part of the cavern.

Then followed one of the hottest half-hours it has ever been my good fortune to live through. Clubbing, punching, biting, stabbing, firing, swearing, we surged in and out of the cave-mouth with our ferocious besiegers, till at last both sides were forced to discontinue further warlike activities by the welcome falling of night. We had lost two more men, and estimated that perhaps ten or twelve Piltdown men had been added to the ever-swelling ranks of the dead.

A score of the Dawn Men ranged themselves in a semi-circle before the entrance to our cave; the rest retired either to their own caverns, or gathered in little groups scattered here and there about the village. In the dim, coppery light that bathed the town, we made out about forty of the quiet bodies of the Piltdown

men who had fallen before us since the Von's savage descent upon their stronghold. Three of our own men had been slain in the evening's bellicose activities, while of those who remained, nearly every one bore some scar or bruise or cut that testified to his participation in the conflict.

Von Kressen touched my shoulder.

"Let's hold a pow-wow concerning the most advisable course out of this damn mess," he suggested, and calling four other warriors to him, the bunch of us retired to one corner of the cave, leaving the other two Karnans to guard the entrance. There we called Deena, seating ourselves in a rough circle as we did so.

"Princess Deena," began the Von, as she seated herself between him and me, "I have called you and these warriors that we may decide how best to extricate ourselves from this predicament into which we have fallen. Although twelve of the Hairy Men die to every one of ours, still we cannot hope to overcome them all and fight our way out of the village. There must be about three hundred of them, and were we in the open, with them surrounding us, our chances for escape would be immediately wiped out."

"You speak correctly, Ludwig," affirmed the Princess. "Something must be done, and done quickly. But first tell me how you knew that Kenneth and I were imprisoned here."

"We did not know it until very late this day. Your warriors and I were hunting the *vidi* for several days, and had come far south of the caves of Karna. We had long since given you up as dead, therefore we never thought of seeking you.

"But today, after having again been unsuccessful in our hunt, we determined to make camp and start out for Karna on the morrow. We were just building our fire when we heard a woman's scream from the forest, followed at once by the sounds of a scuffle. Like one man we rose and ran toward the sounds. Scarce had we done so when Thur—" he pointed to one of our dead warriors lying on the floor of the cavern— "told me that he had glimpsed a white woman of our own race, possibly of our own tribe, in the grasp of one of the hairy men, while two others of his kind accompanied them.

"Gathering our warriors silently about us, Thur and I led them hither on the trail of the Ha-non (Hairy Men), arriving just in time to save Kenneth from being killed by what I believe to have been their leader."

He stopped. Several minutes of silence passed, then Deena remarked, "So my attempted escape was not totally fruitless after all," and proceeded to narrate the story of how she dug her tunnel from her first prison, and her subsequent adventures.

Then she inquired, "How far are we from Karna?"

"A good three days' steady march."

Deena reflected. Then she said, "Do you think it advisable to send a runner to Karna and fetch warriors? We may be able to hold the cave for five or six days."

"I hardly think we can hold out that long, but it is our only hope," rejoined the Von, then turning to the gathered warriors about us he continued, "Is there a good runner here who can fetch a rescue force from Karna within a few days? We will try to press back the Ha-non outside long enough for him to scale the cliff behind us and run into the jungle."

A Call for Help

A BOY of some eighteen Earthly years spoke up, "I am called Manda the Fleet One," he said, "and I believe that if I could reach the forest safely, I could reach the caves of Karna and within a few days bring a sufficient force to rescue the party."

"Good!" exclaimed the Von, "You can start at once." We rose and walked toward the opening of our cavern.

At the cave mouth we gripped our weapons firmly, then we boldly stepped out and fell upon the Piltdown guard without. Manda had remained well behind us, waiting till we had cleared a space before the cave, then he stooped, ran swiftly along the bluff wall, and when he was certain that the Dawn Men's attention was turned to us, scrambled up the steep side to disappear a moment later over its low brow.

The racket of our attack on the guard had brought the armed Eoanthropi streaming from their dwellings again, and so under press of numbers we slowly fell back into our cave once more, battling savagely with our wild opponents. At any rate, our messenger had made his escape, and that was the main thing.

I had stepped back for a breathing spell after having finally dashed out the brains of a particularly unruly antagonist, when something suddenly struck me on the side of my forehead with a resounding *k-nack!* and hurled me stunned against one wall of our "fort." That was the last I knew of the battle until it was all over.

Returning consciousness apprised me of the fact that the fight had subsided, and that Deena and the Von were kneeling beside my prostrate body, chafing my hands and patting my forehead with its aching bruise on the side. Since there was no water at hand, the process of reviving me was somewhat slow, though presently I was able to sit up and look about.

The first thing I saw when I was once more in full possession of my senses was that Groog was lying a short distance away, soft moans breaking from him for all the Spartan efforts he made to suppress them. Holding the Von's shoulder I rose unsteadily to my feet and staggered to where the wounded man lay, surrounded by a group of silent, stoical-faced, but really sympathetic fellow-warriors. His face was white and tense-drawn, the lips cold and bloodless, while their thin, straight line and the firm set of his jaw showed how he was battling to keep back the cries of agony that welled within him. Great drops of cold sweat stood upon his damp brow, and an occasional tear rolled from the corner of his eye.

In his chest were three ugly gashes that showed only too plainly the seriousness of his hurt, for the entire half of his chest was torn and lacerated to ribbons. The wound was fatal, I knew, and I hoped for Groog's sake that the end would come soon.

As we came up I sank to my knee and gripped his hand in silence. In response his white lips quivered in a wan smile, then settled back into their habitual expressionless state. Then he waved his hand toward all about him in an indication that he wanted us to depart, with which request everyone immediately and quietly

complied. Being a brave man who had lived his entire life in the unfriendly jungle, far from the pampered states of civilization that make men hypocritical, cowardly, and self-pitying, he desired to endure his suffering alone, that other ears might not hear the moans that he felt he could no longer repress and thereby brand him as unworthy of his spear.

When we had departed as far as the confines of our cave permitted, Groog gave vent to several choking sobs, squirmed several times, and then with a long sigh he passed away.

It was a long night and a longer day that followed, as hungry and desperate we once more charged the guard before our cave. The effort was fruitless, however, and beyond killing one Eoanthropus, the skirmish netted us nothing in our favor. Quite the opposite, it accentuated the pangs of hunger and left us fagged and breathless.

Twice more during the wet day we attempted to force our way out of the village, but our pains brought only the death of another of our men, and perhaps a dozen of the Piltdown men fell. Now there were but five of us to defend Deena, while our messenger to Karna had no doubt been able to cover but half the distance that lay between us and the Karnan caverns.

That night we spent in rest, too tired to attempt another break for freedom. The Von and Gorga kept guard during the night, another man and myself relieving them in the morning. During the day the Dawn Men made two attempts to enter our cave, but were each time repulsed, though we lost another man in the second encounter. But now we were feeling rather weak, the nerve-racking suspense and muscle-straining fights wearing down our vitality to an alarming degree, while we had no food wherewith to replace it.

"God!" whispered the Von to me, as the long, glowering Venusian day wore slowly away, "but I'm hungry! I betcha my stomach thinks my throat's been cut. Seems like I haven't had a bite to eat for eons."

"Cheer up, bo!" I enheartened him, "If we only had some ham, we'd have ham and eggs, if we had some eggs."

"*If!*" agreed the Flying Dutchman.

Nearing Cannibalism

BUT an empty stomach is nothing to encourage conversation, especially if coupled with the cheery prospect of being clubbed into a pulp any minute by a hairy devil who can hardly be classified as human. So the bright sayings of Von Kressen and myself soon petered out and we lapsed into an abysmal silence from which none of our companions attempted to retrieve us.

Nightfall found us failing rapidly in strength and consciousness. For some forty-seven hours not one of us had had a bite to eat, and so we dragged ourselves about as though we had bodies of lead; half conscious, half asleep.

Gorga and I had the first watch, which was to last about half the night; then the Von and the other warrior, Rok, were to relieve us. During our part of the watch, Gorga and I had to repeatedly shake each other into wakefulness, for the lack of food was slowly driving us into a comatose condition from which we would never again have awakened had we permitted it to gain a hold. As Von Kressen and Rok took the guard, when Gorga had after much effort finally aroused them from their stupor, we warned them of this danger and then cast ourselves upon the stone floor to fall immediately into a nightmare-filled slumber.

The next day was even more murky and gloomy than the ones preceding it; the dark, heavy clouds hung low and streamer-like over the Mesozoic jungle, thunder rumbled almost incessantly, and lightning flashes frequently split the humid skies.

"Looks as if we'll have a slight rainfall today," whispered the Von weakly, and after a pause continued, "Maybe we'll be able to make our escape then. The storm will drive these wild blighters indoors, and we can make a dash for the jungle."

"Perhaps," I rejoined, "But I hardly think these little playmates of ours would permit us to expose ourselves to such inclement weather. If they see us hiking for the woods, they'll come along and persuade us to remain."

"Still, I don't see what else we *can* do. I figure on at least two more days passing before Manda and his gang shows up, provided the kid wasn't killed in the jungle long ago. And I'm starting to get a little hungry."

Hungry! The word conjured up an ethereal meal before me—juicy steaks, potatoes, peas and carrots, pineapple for dessert— and at the thought I groaned.

My eye fell on the body of one of our dead opponents, lying where he had fallen just outside our cave.

"Food!" I whispered to the Von, pointing at the corpse, "Let's drag it in!"

Horrified at the suggestion, my companion stared at me. "Ugh!" exploded he, "Want me to spill my lunch? Ye gods! Fancy eating a *dead man!*"

"What the hell do you expect? A *live* one? We're lucky if we can drag an unresisting carcass in here, let alone a living brute who could lick the stuffings out of the whole crew of us."

"Go 'way, go 'way!" muttered the Von, hiding his face in his hands, "I'm sick enough without your gabbling about cannibalism."

"Why not?" was my bellicose demand, "He's dead, ain't he? He won't know anything about it. Besides, in a case like this we can't have much compunction about a brute who can hardly be considered anything more than an animal anyway. And if he were alive, he'd just as lief eat us as not."

The Von was commencing to be convinced. And I saw that Gorga and Rok had seen my gesture toward the dead Eoanthropus, and now they eyed the corpse in a certain speculative manner that could not be misinterpreted. Clearly they were considering the dead Dawn Man from the standpoint of "food value." The Flying Dutchman noticed this also. He fidgeted.

"Well," said he, slowly, "*You* drag him in. If you try him first and tell me how it tastes, maybe I'll take some."

Rising, I walked rather weakly to where Gorga and Rok sat in the mouth of the cavern. I explained that as none of us had tasted any food for some fifty-odd hours, the demand for sustenance was of immediate importance. Since the dead Dawn Man just without the cavern was the nearest food, I deemed it advisable to transport it into the cave, and I needed their assistance

in doing this.

They never hesitated a moment, but rose at once to go out and haul in the Piltdown man. As I cast a glance at Deena's corner of the cave, I saw with horror that she lay quite still upon the floor, but whether dead or alive I could not tell.

Admonishing the two Karnans to remain a moment, I moved quickly to where the Cave Princess lay, and kneeling, grasped her wrist to feel of her pulse. It was very weak and slow—so slow that it seemed but a matter of seconds ere it would cease altogether. Each throb seemed to come after a greater interval than that before it, and each seemed weaker than its predecessor. The Cave Princess of Karna had lapsed into the last coma that precedes death by hunger and extreme fatigue.

Further delay was impossible. Quickly I rose and returned to the Karnans, then at my gesture we stepped from the cave and seized hold of the Dawn Man. The Piltdown guard, on perceiving our action, leaped up with roars of rage and lust for battle, and savagely charged upon us. My companions and I dropped the arms of our intended repast, and gripping our weapons, crouched low as we awaited the oncoming Eoanthropi.

Nearing the End

AND at that moment the storm burst. The low-hanging, sombre, glowering clouds seemed shattered asunder by the cries of the Dawn Men, and now they descended upon us in solid walls of water.

The battle in the rain was brief. Neither party cared much for fighting in the wet, and in a few minutes we separated, the Piltdown men vanishing in the downpour. But in the moment of our emergence from the cave I had glimpsed a dead deer lying on the ground a score of yards distant, and as the downpour began I ran with what strength I had to where it lay, and dragged it back through the muddy central clearing of the cave-village to our cavern.

My companions were for the most part lying on their backs outside the cave, letting the precious, life-giving rain fall into their open mouths. The Von had dragged Deena to the cave mouth also, and I saw with utmost thankfulness that she showed signs of returning consciousness.

It took but a few minutes to revive the party, and then with our knives we rapidly cut great chunks from the deer and fell to gorging ourselves on its red, dripping flesh. Raw as it was, it was with the greatest gusto that we stuffed the meat into our stomachs, nor could any of us recall having ever eaten a tastier meal.

Having finished our primitive repast, we all felt drowsy and a great desire to sleep overwhelmed us. However, by exerting our wills to the utmost, Von Kressen and I managed to sit guard at opposite sides of the cave entrance, while our companions sought the interior of the den and slept.

All the rest of the day the rain poured down upon the damp jungle of the savage planet. Twice we made half-hearted attempts to quit the village, but always a watchful party of Piltdown men would appear out of the rain to discourage our intention and send us back to our cavern.

But now that we had food, we felt confident that with Von Kressen's rifle we would be able to hold the cave for two or three days more until Manda showed up with the Karnan warriors he had been dispatched to bring; provided of-course, that he had not been killed on his perilous way to the Karnan plateau.

That night Gorga and Rok sat guard while the German and I wooed Morpheus. The rain still continued, though not in such a stormy manner as during the daytime.

The fourth day of our incarceration dawned fairly clear however. After eating a little of our deer the Cro-Magnon men sought a little rest in a corner of the cave, the Von and I guarding the entrance of the cavern and glaring wickedly at the Piltdown watchers squatting in the central clearing of the village.

Half the day passed, during which time the clouds rolled back considerably, giving us an almost sunny day. Indeed, at times the solar orb did push its rays through the overhanging mists, and lighted up the landscape with a sickly yellow glow. At this time we noticed that more and more of the town's populace was congregating outside our cave, and within a short while the motive became quite apparent. A burly individual who had obviously assumed the responsibilities of chieftainship among the Dawn Men, was now haranguing them in their guttural, barking tongue. His attitude presaged trouble—if my guess was anywhere near correct.

Deena awakened Rok and Gorga, who immediately upon perceiving the activities of our hosts, picked up their weapons and stationed themselves beside the Von and me. The German was armed with his automatic rifle, of course, and I still retained the murderous shillalah that had so nearly quenched all my interest in life. Gorga and Rok carried clubs, knives, their bows, and perhaps fifty arrows between them.

The bellicose activities were precipitated by the Dawn Men at long range. One of these enterprising individuals hurled a club at our party in general, which touched no one, and in payment for this audacity he was speedily laid flat by an arrow from Rok's bow.

That started it for good. With furious cries and snarls the Eoanthropi concentrated a perfect storm of missiles of all descriptions upon us, whereto we promptly retaliated with arrows, bullets, and the selfsame missiles which our foes had flung at us.

It was soon obvious that as long as these tactics were followed by the enemy, we had little to fear. Already more than a dozen Piltdown men lay dead and wounded on the ground, while on our side the total number of dead, wounded, and missing summed up to a blue welt on Gorga's shoulder, where a Piltdown club had struck a glancing blow.

Over a score of Eoanthropi lay *hors-de-combat* when this truth filtered through their thick skulls, but once it had done so, they effected a speedy retreat out of range of our eyes. For more than an hour an ominous silence and calm rested over the village, which was eventually broken by the soft, slithering sound of many naked feet stealthily creeping toward our cave-mouth from the sides.

Rok placed a bolt in his bow and stepped out of the entrance into the clearing. Scarce had he done so when an enormous, shaggy body launched itself down upon him from the roof of our cave; a great, brawny arm

grasping a knotted club descended in a short arc upon the unfortunate man's head, and without a sound he crumpled to the loam.

Gorga's arrow sped from his bow, deep into the savage side of the Eoanthropus, who with a snarl of rage and pain wrenched the offending barb from his side as he turned toward us. At the report of the Skipper's gun he pitched face down upon the floor of our haven, his savage visage still contorted by that ugly snarl.

But now the enemy was upon us. We had withdrawn slightly to the middle of the cave, and now the entrance was choked by a score of the crouching, wild devils, while behind them were a hundred more. Only a dozen feet separated us from the foremost.

The Von smiled at me grimly through his two-and-a-half month's growth of white beard.

"This doesn't look so good, Ken," he remarked slowly in English, "I won't be able to get in more than ten shots before they come to grips with us. But before we men pass out, I guess you'd better give Deena the works, don't you?"

His finger tapped the butt of the rifle as he voiced the last sentence, and he glanced significantly toward the slowly advancing cave-men.

"Don't worry," I replied, "She's got your knife, and she'll take care of herself before any of these unholy blighters can touch her."

"Then let's go," he cried, and throwing the rifle to his shoulder he began to fire at top speed into the massed ranks of the Dawn Men.

As he and Gorga kept the cave-men back, we slowly retreated to the rear wall of the cavern, there to put up a last stand against them. When we reached it I turned to Deena with what I hoped was an encouraging smile.

"This doesn't look so horribly good," was my declaration, "but—maybe something will come along to get us out of this mess." I must confess that I wasn't troubling my head very much with conjectures to the nature of that something, for I was certain beforehand that there was no such "something" in the first place. The Cave Princess returned my smile, except that hers was less hypocritical, for it was a truly brave one, while mine was but a mere cloak for the grave fears that swayed within me.

"You and Ludwig have been very brave and true warriors to Karna," she stated, "and it is sad that you were never permitted to return to Karna to enjoy the chieftainship you both have so well earned."

Necessity forced my attention now to the Dawn Men, who had driven us to one corner of the cavern and were swiftly closing in on us. I glanced at my male companions. Gorga stood at my right, belligerently swinging his heavy club. His bow and empty quiver lay on the floor before him. Von Kressen, at my left, grasped his automatic rifle by the muzzle, ready to bring it down upon the skull of some hapless Eoanthropus. I felt the corner of my mouth curl into a twisted smile. Gorga's last barb was shot—Von Kressen's last bullet expended. And the savage Dawn Men fast closing in to our annihilation.

It was the end.

CHAPTER XI

The Last Struggle

DEAD silence had fallen over the village. The realization of our impending death had served to effectually lock the mouths of our party into so many thin, straight lines—white, compressed, bloodless. And the Piltdown men had also been worked up to that point of anticipation where utter silence is absolutely necessary in order to preserve any form of mental balance: the slightest sound makes one jump violently and break into hysterics that border almost on mania. It is the time, when, in anticipation of some momentous event, one reaches that stage of nervous strain where conversation or sound of any sort is irritating and aggravating—sometimes even infuriating—and is to be immediately discouraged.

Just such a situation was this. Nearly a hundred people (if the Dawn Men may be designated as such) were in that rockbound chamber, yet each one breathed so softly that no whisper of the air passing in and out of two hundred nostrils broke the silence. The Eoanthropi, as they advanced the few remaining feet between us, put down their naked feet so carefully that their steps were utterly noiseless. We three white men had tensed our muscles for the one blow each one was determined to get in ere he was swept into the Eternal Oblivion.

Suddenly, sounding like a rifle-shot in the tense, nervous silence that cloaked the cave-village, a wild cry rang through the air. The Dawn Men halted and with startled grunts jumped nervously, jerking their heads about to stare out of the cave mouth. Over the heads of the short, stockily-built half-brutes before us, I too could see out into the central clearing of the town, and at the sight of Manda the Fleet One bounding toward the congregated Piltdown men, trailed by a throng of sweating, travel-stained warriors, a great shout of joy surged from my throat to ring jubilantly over the grounds of the village.

Simultaneously my club descended in a terrific blow upon the skull of one of the somewhat flustered Dawn Men, whose attention had again been attracted to us by my whoop.

The Skipper and Gorga were right with me, the rifle of the former and the club of the latter mowing a semicircle of death about us in the ranks of the Eoanthropi. By the time these had regained the wits that had been scattered by the shout of Manda, we had killed a dozen, while our deliverers in the village "street" had also accounted for a score, as we learned later.

Then the Eoanthropi charged us, and we were again driven into a little knot in a corner of the cavern. But their morale was somewhat shaken, and they frequently made nervous slips of which we took advantage, so that we were able to hold them at bay, with the death-list of our opponents slowly mounting.

The appearance of the Karnan warriors had occasioned a grand leave-taking among the Piltdown men gathered about the mouth of the cavern, so this position was now free, with perhaps fifty Dawn Men left in the cave.

These would have made short work of us now, however, had not just then the attacking force pushed

through the entrance and fallen furiously upon the backs of the Eoanthropi congregated in the rocky room. In a minute the place was a shambles. Clubbing, biting, clawing, shouting, snarling, barking, with the Von and myself throwing in a goodly amount of choice terrestrial invective for good measure, the hairy and the hairless combatants surged and rioted in hand-to-hand encounter about the cavern.

Being hard-pressed myself, as were my companions, I hadn't the leisure to take an analytical or philosophic view of the battle, so by the time I had finished my fourth personal opponent, the slaughter was over.

Never, I believe, have I gazed upon a more appalling scene. The cave simply swam in blood—blood that bespattered breast and face, and lapped up in little waves against our ankles. Fully sixty ape-like corpses lay in the most indescribable, grotesque postures all over the stony floor, mingled with the white, hairless bodies of a score of Cro-Magnon men who had laid down their lives for their beautiful princess.

Five or six Karnans strode about the cave examining each fallen foe, and when they discovered one in whom life was not yet extinct, their long, sharp knives speedily remedied this deficiency.

In the rest of the village the work of the invading force had been equally thorough. Manda had brought a total army of some two hundred Karnan warriors; a fourth of these had been slain, but the rest had killed a good hundred and fifty of the Piltdown people. Of the two score or so of the latter that still remained, all were driven into the jungle, so that not a single living Eoanthropus was now in the village.

The first thing we all did, once our possession of the town was assured, was to raid the larder of the Dawn Men. And how we did *eat!*

During the meal we learned that Manda the Fleet One had covered the thirty miles to Karna in a day and a quarter, had speedily gathered his force, and in two and a half days brought them back to the Dawn Men's village. When one considers the difficulties and dangers that attend a forced march through thirty miles of tangled, swampy, disease-infested and beast-overrun jungle, one can readily perceive that the youth's achievement was something of a marvel. All during that tiring march the boy had permitted no command but his own, urging his older followers onward in the face of every obstacle, allowing only a minimum of time for sleeping and eating, spurring himself and his men to the verge of exhaustion by the knowledge that the Princess—his Princess, who to him as to all Karnans was a sort of goddess—was in danger.

An Ambitious Plan

I HEARD of the young man's attainment from several of the men who had followed him to our rescue—men ten and twenty years older than himself—and in each case their respect and admiration for his courage and power of command were only too apparent. And when I heard their story, I felt a lump of love and admiration for the boy well up in my throat—a phenomenon I later learned was duplicated in the throats of Deena, Gorga, and the Flying Dutchman. The boy won a great place in my heart that day, not only for coming in time to save Deena for the throne of Karna, but for a hundred more personal reasons beside.

Yes, Manda had gained some prestige in the tribe of Karna that day, and to the four of us whose salvation he personified, he was beyond a doubt the hero of the hour. For that matter, to me he is still the bravest man who ever walked on the face of that savage planet.

That selfsame evening the Cave Princess bestowed upon the deserving lad the rank of chieftain, which he accepted modestly and in full realization of his responsibilities. Manda was—and is—a true product of the trying times that rule wild Venus. Honest; straightforward; courageous; unwhimpering at danger and hardship; physically, mentally, and morally strong; unconceited, yet taking a just pride in his achievements; unmarred by the hypocrisy that recurs only too often in the Terrestrial youth—that is Manda the Fleet One.

That night we slept soundly and peacefully in the village of the Dawn Men, where we stayed for three days afterward in order to thoroughly recuperate. During that time we neither heard nor saw anything of the original possessors of the village, so we assumed that they had betaken themselves to some other locality, at least until we vacated our present position.

The morning of the fourth day we took up the trail to Karna, which we reached after an uneventful and unhurried march of four days.

Our return to the Karnan caverns was celebated by a grand "homecoming" given by the Karnans who had remained in the cave village. The dances and songs lasted all through the rainy night, not a whit dampened by the meteoric state. Next morning, in the throneroom, Deena received the chieftains who ruled distant towns owing allegiance to the Cave Princess, and each one renewed his vow of fidelity to the fair ruler they had thought dead. Here also she proclaimed publicly the new chieftains she had ordained, namely: Manda, Gorga, the Von, and myself.

We were given our head-dresses of fifty grey-black feathers, and each was given also a new set of war-weapons as well as certain charmed bits of carved wood, donated by the Witch Doctor of the nearest village, who was to assume the ecclesiastical responsibilities of Karna now that Nogas was dead. The former Witch Doctor's two daughters had mated during our absence—one of them to the new High Priest of Karna.

When the usual order of things had been again restored, the Von and I, often accompanied now by Deena, made frequent hunting trips into the grim Venusian forests; trips that were a constant source of knowledge and delight to me. On these occasions I inquired of Deena how large the tribe of Karna really was, and how many villages it comprised. In reply she informed me that the Karnan clans totalled some eleven thousand individuals and numbered fourteen villages scattered to the west and north of Karna itself. Some two thousand of these people were direct subjects of Deena, residing in the main village where she had her primitive abode, while the other thirteen cave-towns numbered from three hundred to twelve hundred inhabitants each. These towns, I learned, were situated at distances ranging from three to forty miles from Karna, which was the southernmost village of the nation.

To the south, at perhaps five miles from Karna, was the unmarked boundary of the nation's stamping-

ground, beyond which members of the tribe rarely ventured. South of this line began the country of the lower orders of man, the large Venusian apes, and the great reptilian monsters.

My recent experiences filled me with the ambition of driving the first of these three inhabitants of the southern jungles from the immediate vicinity; so I asked Deena how large an army the fourteen villages of Karna could offer, to which she responded that she didn't know, but doubtless quite a large one. I promptly determined to recruit such a force, and so at once prepared to visit the various cave-towns and request their assistance in supplying me with volunteers.

I asked for a guide and one other companion, and was quite gratified when a hundred strong young men offered their services. I chose Manda and another young warrior, Or, as guide. Then one day, two weeks since our return from the village of the Dawn Men, we three set forth to visit the various communities that comprised the nation of Karna, leaving the Von to gather recruits from the chief town. Von Kressen had taught some sixty young men how to shoot with our guns, though with only two rifles and two short-arms in the whole village it was something of a question what practical good the knowledge would do them.

We reached the nearest settlement by the middle of the day, and after we had explained our mission, occupied the remainder of the afternoon in enlisting two hundred staunch warriors for our expedition, ranging in age from eighteen to forty terrestrial years.

At this town we spent the night, and at daybreak the next morning, continued to the next one, a day's march away to the north. That evening as we sought the cave the town had placed at our disposal, we had half a thousand more warriors listed for our project.

Thus we three traveled in a zig-zag line toward the west, where through the distant mists we could occasionally discern the shadowy bulk of a mighty mountain range. After two weeks we reached the foothills of this range, having thus far recruited fifteen hundred warriors from six cave-villages in the forests sloping toward the sea.

The Titan of the Past

Of course, our path was a slow and arduous one, beset with the countless dangers of the untamed wilderness—wild beasts stalked us day and night; venomous reptiles lurked in the lush vegetation of the untracked jungle; the terrific thunderstorms of wild Venus frequently launched themselves upon us; poisonous and annoying insects harassed us at every step; great trees, monarchs of the forest, crashed about us as their time-ravaged bases could no longer sustain their great weights. To describe in detail all the hazards of that wearisome march would fill a large volume, the writing of which would employ me for a year.

On the sixteenth day of our journey a terrific thundershower set in shortly after we had broken camp, lasted about an hour, and then the skies rapidly cleared, unveiling to our vision a great range of towering hills at whose jungle-clad base we stood. Hitherto, as I have said, these mountains had been veiled from us by the dense vapors that clothe the savage planet; but now as I obtained a clear view of them, the topmost peaks bathed in the golden radiance of the sun, my eyes must have fairly popped from my head, for the mighty barriers that stood before us reared their great bulk fully eight and ten miles into the Venusian air.

High up on the hither flank of these mountains, Or informed me, was the westernmost cave-village of the Karnan nation, which he said should be able to offer four or five hundred warriors. The ascent of the range was a dozen times harder than the march through the forest of the lowlands behind us; so when night overtook us we were barely more than a mile and a half above the base of the mountains we were climbing.

The next day we worked up about four miles. At this point the vegetation, which had been gradually changing from the tropical to the semi-tropical, assumed the nature of that found in the Earth's temperate zones—basswood, ash, a species of oak, and several varieties of nut trees, one of which closely resembled hickory. It is of this wood that the spear and bows of Karna's militia are constructed.

Presently we came to a stretch of rocky ground running to the foot of a steep escarpment reaching a thousand feet into the grey heavens above. A narrow pathway had been carved into the rock by the elements, and up this we started, I in the lead.

Two hundred feet we had ascended when the trail, if I may so call it, broadened suddenly on a little flat shelf which ran to the right around a shoulder of the cliff. My head had just topped the rim of the shelf when a shaggy black bulk rounded the corner of the cliff and ambled toward me. It was the first Venusian cavebear I had ever seen—a great brute standing seven feet high at the shoulders, and fully twelve feet long. Its round head, two feet in diameter, was armed with a pair of long sabre-teeth some eighteen inches in length. Its hair was black save for a snowwhite snout like that of the terrestrial *scumari*, king of the Andes.

To say the least, we three men were in something of a predicament—I especially so. The narrow causeway on which we stood did not permit one to turn about, and yet to go down backwards was as impossible and fatal as turning. Death lay on three sides, and an equally certain death stared me in the face from the eyes of this titan of the Past.

For a space we stood there motionless, I and the bear, staring steadily into each other's eyes. At first he did not seem warlike—just curious. He wrinkled his white muzzle, cocked his head to one side reflectively, and then ambled toward me with the apparent intention of tasting my face with his long pink tongue, which peeped cutely from between his jaws.

However, this form of endearment did not particularly appeal to me, therefore I cast about for some avenue of escape. There was none. Then a little insect came flying noisily through the air, and suddenly perched on the bear's nose, where it paraded about inspecting its position. Apparently this performance tickled the great beast, for he suddenly shook his head violently, and as the little bug launched itself into the air he snapped at it.

The insect was mortified—and angry. With a buzz that bespoke its sentiments only too plainly, it resumed its perch on Bruin's proboscis and suddenly stood up on its hind legs, beating the air furiously with its wings.

And that started it. The bear emitted a frightful bellow of pain and rage, clamped one paw over his wounded muzzle and squashed his offender. Then he looked around for something to vent his suddenly aroused fury on. No longer was he a peacably curious dweller of the cliff, but a mighty demon of incarnate ferocity. His wicked, blood-shot eyes caught me where I stood on the narrow trail worn into the age-old rock of the grim, grey cliff, and so with another ground-shaking roar he lunged toward me.

As I have said before, it was impossible to turn on that narrow pathway, and to attempt to descend it backwards would be suicidal. Behind me was the treacherous stairway by which we had ascended; to the left was the cliff—steep, defiant, unscalable; to the right was space, falling two hundred feet to a rockstrewn slope; before me was a little ledge, occupied by an enraged Venusian cave-bear.

No, the situation was certainly not a very rosy one, and for a split second I thought that someone else would have to gather the rest of my prospective army. My sensibilities were stunned— but only for a fraction of a second. Then I whipped my bow from my shoulder, turned to the right, and without a word to my companions, dived head first far out into the yawning emptiness.

At the last moment my eye had registered something on my brain—a short stump of rock extending from the cliff wall thirty feet below me and a dozen feet to my right. As I plunged downward I swung one end of my bow toward that projecting rock. If it caught in the corner of the bow, between the wood and the string, all was well; if not—

My downward plunge was suddenly checked. There came a rending sound; the bow sagged ominously.

Glancing up I saw the bow caught on the rock knob as I had hoped, but at the upper end the tough wood had split wickedly, and only a few frayed strands of it barred me from extinction.

(To be continued)

AN IMPORTANT

ANNOUNCEMENT

TO ALL READERS

Will be found on

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OF THIS ISSUE

The Lizard Men of Buh-Lo

(*Continued from page* 417)

member, I wondered. It seemed to me that hers was the happy child-like faculty of soon forgetting danger. In a little while she was bringing me blossoms to sip, fluttering on gossamer wings as happily as ever. But as for me I was played out. My food tablets were gone, my bullets and gas-bombs exhausted. It was imperative that I return to earth. Entering the bal-wheel I shut the door, injected the suspended animation fluid into my arm, started the automatic machinery to working, and—here I am!"

* * * * *

Though forty years have elapsed since William Swiff told the incredible story which I am setting down here, I can never forget the amazement with which I heard it.

"But," I exclaimed, "you tell us only of what happened in a few days while you have been gone years!"

"That is true," he said, "and I do not attempt to explain the phenomenon. A day over there is evidently more than a year of our time. As you see I am no older than when I started."

It was true. Ten years that had aged me had failed to leave any mark on the face or body of William Swiff. I think this more than anything else made me believe his bizarre story.

"Don't you see," he cried, "how wonderfully well the discovery of this other dimension fits in with my ambition to stay young while time passes here? It is my intention to return with weapons and machines to the Hummingbird People and the Ah-wees. Over them I shall reign as a god. Perhaps I will create a great civilization out of the Ah-wees and city of Ga-atha. Who knows?"

Who knows indeed? Surely not I. For three months after his return home William Swiff again went away in the bal-wheel. But not alone. Powell went with him. Before going William Swiff arranged his financial affairs so as to preclude any trouble. The laboratory he endowed with a maintenance fund for its upkeep. I was to be its first guardian. If I should die another would take my place.

On the day of their departure in the bal-wheel I stood in the laboratory and watched William Swiff and Powell load the chamber with their equipment. Under the action of the primary ray I saw the bal-wheel become invisible.

"Good-bye," said William Swiff, "and do not worry about us. In a few days—years to you—either Powell or I will return and bring you a message from beyond."

He stepped into the chamber and closed the door. After awhile I thrust a pole into the space where the bal-wheel had stood but there was nothing there.

That was on March 6th, 1945. But since that time the days have lengthened into months and the months into years, and I am an old man now, eighty years of age, fast approaching the grave, and still no message has come from Powell or William Swiff.

Forty long years have passed since they whirled themselves out of our time and space. And through all those long forty years I have been waiting for their return. I am waiting yet.

THE END.

What Is Your Knowledge

1. What happens to an object traveling at the speed of light, according to the Fitzgerald Contraction theory? (Page 435)
2. What actual cases of suspended animation are known of in nature? (Page 406)
3. What is meant by the term Andromeda? (Page 392)
4. What elements are necessary in the atmosphere for human life to exist? (Page 392)
5. What is a *noctilucae?* (Page 393)
6. Is it possible for a creature to be killed and yet be animate? Why? (Page 445)
7. What were the characteristics of the Piltdown men? (Page 453)
8. What is a mirage and how is it formed? (Page 428)

Marooned in Andromeda

(*Continued from page* 401)

With a final roaring and screeching of its propellers, the bulk came to rest within fifty feet of the fire. The light flickered on its metal sides and revealed the well-known ladder down which the three mutineers had climbed in an alien darkness.

A figure descended the ladder and came toward the fire. It was Captain Volmar. His face was drawn and livid in the firelight, and looked older than the two men remembered it. He greeted them stiffly, with an odd trace of embarrassment in his manner.

"I'm certainly glad to have located you," he announced, without waiting for Roverton or Deming to return his salutation. "I've been flying around this damn planet all day, hoping there was one chance in a trillion of finding you again. I didn't take any bearings when I put you off in the night, so of course I had no idea where to look. I was about to give it up, when I saw the fire and decided to investigate.

"If you'll come back with me," he continued, "we'll let bygones be bygones. I'm short-handed now, and am going to give up the trip and start back for the solar system. We began to develop engine-trouble not long after we put you off; and two of the men were electrocuted by a short-circuit before the trouble was remedied. Their bodies are floating somewhere in mid-ether now—I gave them a space-burial. Then Jasper fell ill, and I've been running the flier single-handed for the past twenty-four hours. I'm sorry I was so hasty with you—I certainly put you off on an impossible sort of world. I've been all over it today, and there's nothing anywhere but seas, deserts, marshes, mud-flats, jungles of crazy-looking vegetation, a lot of equally crazy ruins, and no life except over-grown insects, birds, reptiles, and a few cliff-dwelling pygmies in the sub-polar regions. It's a wonder that even two of you have managed to survive. Come on—you can tell me your story when we're aboard the flier."

Roverton and Deming followed him as he turned and re-ascended the ladder. The man-hole closed behind them with a clang that was more grateful to their ears than music. A minute more, and the flier was climbing the heavens along the crepuscular curve of the planet, till it soared into the daylight of Delta Andromedae. Then it rushed on through the sidereal gulfs, till the great sun became a star and began to resume its wonted place in an ever-receding constellation.

THE END.

The Man Who Laughs

(*Continued from page* 441)

the floor. It fell, breast down, with Crawford beneath it, rolled over halfway and lay supine, its painted face staring vapidly up at the white ceiling.

With a moaning cry, Menley dropped to his knees beside Crawford's body.

"Wake up, wake up!" he begged, tugging at the mangled remains of his erstwhile master.

Then suddenly, horribly, he began to laugh. He laughed when the servants came, hours later, from the big house on the hill. He laughed as they took him away. He laughs still, but his laughter is heard only by those who have become hardened to it, calloused souls behind strong walls to whom such laughter means—nothing.

THE END.

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Science Questions and Answers

THIS department is conducted for the benefit of readers who have pertinent queries on modern scientific discoveries and on established scientific facts. As space is limited we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical, also to print answers as soon as we receive questions. However, questions of general interest will receive careful attention. If you desire individual answers to your queries, enclose 25c in postage to cover time and mailing.

Long and Short Waves

Editor, Science Questions and Answers:

Will you please answer the following questions?

1. What is meant by long and short waves when speaking of radio and light waves?
2. What were the last five elements discovered and what are their atomic weights?
3. What is the Heaviside Layer?

Robert Gailey,
3238 N. Carlisle St.,
Philadelphia, Pa.

(1. A wave of radiant energy is not different in form from a water wave. Watching water waves near a shore one sees that each wave has a peak which descends to a trough and rises to the next peak. Now the distance between two peaks or two troughs is called the length of the wave. A light wave, sound wave, radio wave or wave of any radiant energy has the same construction: a series of peaks between which are troughs. The terms long and short as applied to waves of radiant energy such as radio [in radio short waves are those below 200 meters. Long waves those above 200 meters], light, heat, waves are only relative. If we look at the spectrum of visible light we have a variety of colors from violet at one end to red at the other. The violet light is composed of waves whose wavelength is shorter than the wavelength of the red waves. But to indicate that the terms long and short are only relative, the reddest light that we see, which has the longest visible wavelength has a wavelength of only 3/100,000 of an inch. In other words between two troughs or two peaks of a wave of red light there is only .00003 inches. One can imagine how compressed these waves are. The most violet light, that is the shortest visible waves, has a wavelength of half of this or .000015 inches. Beyond the visible spectrum we have waves much longer than visible light such as radio waves whose length may be hundreds or thousands of yards. At the other end we have waves much shorter than visible light such as X-rays, and Gamma rays [emitted by radium] whose wavelength may be as short as .0000000001 inch.

2. In the order of their discovery the last six elements discovered are: Illinium, masurium, rhenium (atomic weights unknown); hafnium, atomic weight 178.6; lutecium, atomic weight 175; dysprosium, atomic weight 162.5.

3. The Heaviside Layer is supposed to be a layer or blanket of ionized gases about 75-100 miles above the earth which has the ability to reflect radio waves back to earth. In other words it is a mirror which does not allow radio waves [except very short ones] emanating from the earth to pass through it but reflects them.—Editor.)

On Sun Spots

Editor, Science Questions and Answers:

Would you kindly answer the following questions in your columns?

1. What are sun spots; how are they formed?
2. Is motion in space perpetual? If so, how do you account for this?

C. W. Crede,
219 Roane St.,
Charleston, W. Va.

(1. Sun spots are great areas of blackness on the surface of the sun, believed to be due to the fact that these areas have a much lower temperature than the surrounding neighborhood. One of the theories is that the lowering of temperature is caused by sudden expansion of gases in the place where the sun spot is formed. The expansion may be caused by whirlpools or other maelstroms in the seething solar surface. Sun spots are believed to be the cause of electro-magnetic fluctuations on earth—magnetic storms, changes in radio reception, etc.

2. Newton stated that a body in motion will continue in motion until an external force acts on it. In some way, celestial bodies were given their original motions [the motion of the earth is believed to have been caused by the flinging off of a mass of material from the sun which became the earth] and until other bodies or forces stop them they will continue on. From our point of view, the motion of the earth around the sun is perpetual. But in aeons to come there might be visible a slowing down of this motion. After all, we have been observing things for much too short a time to come to any conclusions in the matter. A star, such as the sun, is moving through space because it is part of a great whirlpool of stars, the Milky Way, which is rotating about its own axis. How the Milky Way originally got its motion we do not know, and from our point of view its motion is perpetual. We are dealing with things that we simply have no means of measuring.—Editor.)

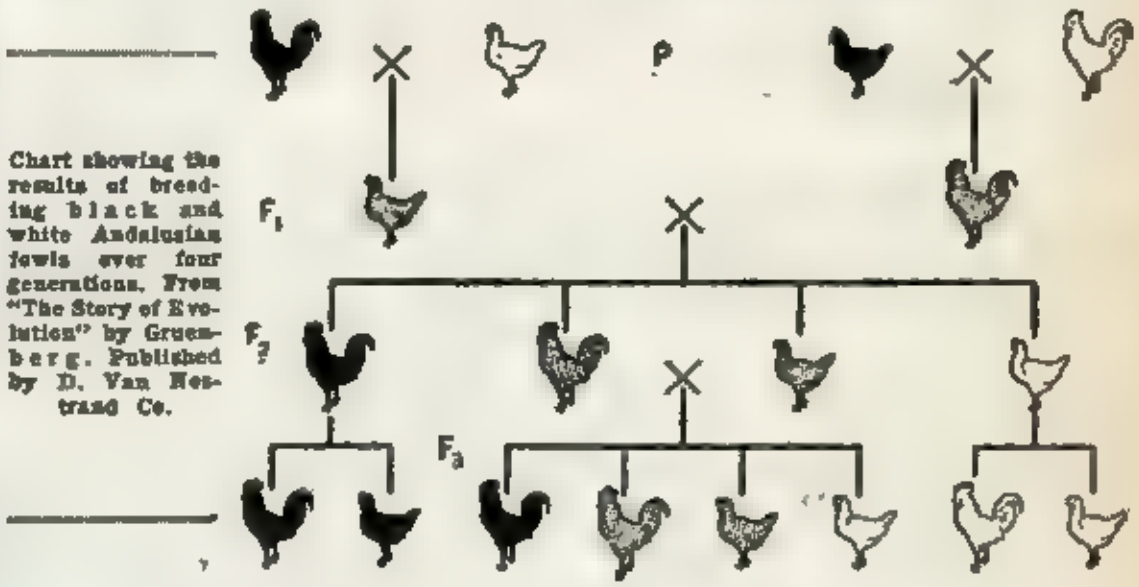

Chart showing the results of breeding black and white Andalusian fowls over four generations. From "The Story of Evolution" by Gruenberg. Published by D. Van Nostrand Co.

Interbreeding and Heredity

Editor, Science Questions and Answers:

I have heard a lot about scientists being able to determine in advance the results of interbreeding among animals and plants. Could you tell me about it? Could this be used also with regard to man?

Horace B. Falcon,
368 West 44th Street,
New York, N. Y.

(From the studies and experiments made on the interbreeding of various plants and animals certain general conclusions were arrived at with regard to heredity. The accompanying picture will make clear the results of one of the most typical experiments. A black and white Andalusian fowl were bred together and the result was a "blue" fowl. When two blue fowls so produced were bred together the result was not blue fowls as one might expect but a mixture. Half of the fowls born were blue, one-quarter of them were white and one-quarter black. Thus if eight fowls are part of a brood, four will be blue, two white and two black. Now if two black fowls [whose grandparents were white and black] are bred together they will revert to all black, and two white will produce all white. The results then can be mathematically determined, and have been verified in experiments with animals and the interbreeding of races of humans.

Thus in a mixture of a white and a negro the child may be expected to be mulatto. If two mulattos were to marry, half of the children would be predominantly mulatto, one-quarter would be predominantly white and one-quarter predominantly black.

In other experiments made on the interbreeding of various types of peas, Mendel found that he could cause new varieties to form. That is, if one type of pea were smooth, green and came of a long vine and another type were wrinkled, yellow and from a short vine, that nine different varieties were possible of production.

Some attempt has been made to link Mendelian heredity to the determination of the physical characteristics of humans. That is, from a knowledge of the physical characteristics of the parents, a prediction about what future offspring will be like is believed possible. So far, however, this has not been definitely proved.—Editor.)

Jumping From A Train

Editor, Science Questions and Answers:

If a man, standing on top of a train moving at, say sixty miles an hour, should jump straight up into the air, would he not come down in exactly the same spot of the moving train, just as would be the case inside the train? Would air resistance cause any appreciable difference?

Mrs. H. C. Leonhardt,
903-68th Ave.
West Allis, Wisconsin.

(Air resistance acting on a man traveling at sixty miles an hour would undoubtedly tend to slow up his motion if he jumped upward from the top of a moving train and he would come down nearer the rear of the train. And the change in his position on the train, when he fell back to it again, would be due only to the resistance of the air. The train itself is being acted on by the same air resistance but the train is being supplied with power constantly to overcome this resistance. Once the man jumps from the train, he has no longer the benefit of this power, he has only his acquired velocity which the air slows down. A man jumping up inside of a railroad car will come down on the exact spot if he went exactly straight up.—Editor.)

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_____

*Occupation*_____

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complementary, critical, or whether it contains a good old-fashioned brick bat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 25c in stamps to cover time and postage is remitted.

Not the Diesel

Editor, WONDER STORIES:

In your August number you published a most remarkable story by the name of the "Radium Master" by Jim Vanny.

I congratulate Mr. Vanny on his ability to create such a vivid imagination in the reader's mind. But, however, there was an important detail in the plot of the story that was badly in error.

Both airplanes (which, incidently, were equipped with Diesel engines) were forced down in the city of Urania by magneto failure caused by the mysterious radio-active energy. I do not doubt the latter but from my understanding of the Diesel engine, it runs entirely independent of any electrical ignition system. Therefore, why would their engines need magnetos?

According to Webster, this is a Diesel engine "A type of internal combustion engine in which the suction stroke draws in only air which the compression stroke compresses so highly that the heat generated ignites the fuel which is automatically sprayed into the cylinder under pressure." In the future, of course, engines may burn electrically ignited fuel oil, which is the fuel the Diesel burns. I doubt, however, if they will be called Diesel engines, though, as they will not embody the Diesel principle.

I hope your magazine may improve in the future as it has in the past, and if it will not be too much effort on your part, remind Mr. Vanny of his error. I hope he may continue to write these splendid stories in the future.

Paul Jones,
755 E. Eastwood St.,
Marshall, Mo.

(We appreciate Mr. Jones' courteously phrased criticism of Mr. Vanny's story. We had caught the error—but when it was too late and the magazines were already on the press. Naturally a Diesel engine would need no electrical ignition system except perhaps something to start the initial compression. In fact the lack of an electrical system, thereby reducing the fire hazard, has been claimed as one of the great advantages for the Diesel.

As we said, we appreciate the consideration our correspondent uses in voicing his complaint. We do receive violently conceived and frenziedly executed letters often in the poorest of taste from readers who feel that a mistake in a story is a personal offense to them. Such readers should really conceive of the editors as human beings, subject, like themselves, to the same failings, the same errors and the same pride. A letter therefore that is carefully thought out and worded courteously will often be printed while some hastily conceived letter will only cause offense and resentment.—*Editor.*)

No Other Has Done So Much

Editor, WONDER STORIES

In response to Mr. Donald Peart's letter which stated that he will "never buy or read your magazine again," I feel safe to say that he is only kidding us, for anybody who has read your magazine for a little while and *knows Mr. Gernsback* will never make that mistake.

Everybody should admire the way the magazine has tackled this delicate question of science-religion. I think it's the only way that this question will be settled.

I agree with Mr. John L. Kline in leaving the science in our wonderful magazine, but if you will give us such masterpieces as "The Eternal Man" by D. D. Sharp, "The Cubic City" by Louis Tucker, the famous "Human Termites," "Conquerors" and "The Evening Star" by Dr. David H. Keller, "The Space Dwellers" by Raymond Gallun, "The Fitzgerald Contraction" by Dr. Miles J. Breuer, the unforgettable "Rescue From Jupiter" by Gawain Edwards, "The Land of the Bipos" and "An Adventure in Time" by the clever Francis Flagg, "Before the Asteroids" by Harl Vincent, "The Color of Space" by Charles R. Tanner and "The Raiders from Space" by Vernon A. Lower (these two last authors are our O. Henry's of Science Fiction) we will always be satisfied. And lastly "Into Two Worlds" by our excellent Edward E. Chappelow and "The City of the Living Dead" by Laurence Manning and Fletcher Pratt were great.

In the "Air Wonder" we had the famous "Ark of the Covenant" by Victor MacClure, "Men With Wings" by Leslie Stone, "The Planet's Air Master" and "The Return of the Air Master" by Edward E. Chappelow, "The Air Terror" and "Through the Meteors" by Lowell Howard Morrow, "Around the World in 24 Hours" by R. H. Romans, "Outcast in the Air" by Edmond Hamilton, "The Crystal Ray" by Ray Gallun, "Freedom of the Skies" by Edsel Newton, "Flannelcake's Invention" and "The Flying Buzz-Saw" by H. McKay, the famous "Red Ace" by our wonderful Eugene Gen. Key, and lastly "The Sky Ruler" by Ed Earl Repp.

No other magazine has ever done so much work in one year's time. Now in the WONDER STORIES you score five. They are "The Incredible Monstrosity" by Walter Kateley, "The Time Ray of Jandra" by Ray A. Palmer, "Waves of Death" by Wesley Arnold (this one was the best) and "The Time Valve" by Miles J. Breuer. The first serial was rotten. "The Bat-Men of Mars" was just another thriller and the second was just as bad. And will you please make Ned Gothram's nephew quit saying "I'll bet you a dozen pair of socks," it gets on my nerves.

ON LETTERS

BECAUSE of the large number of letters we receive, we find it physically impossible to print them all in full. May we request our correspondents, therefore, to make their letters as brief and to the point as they can; as this will aid in their selection for publication? Whenever possible, we will print the letter in full; but in some cases, when lack of space prohibits publishing the complete letter, we will give a résumé of it in a single paragraph.

I might mention that I am chairman of the membership committee of the Amateur Scientific Club with headquarters in Chicago. We have a chapter in New York and another in Pennsylvania, and things are going quite well. Anyone interested in joining can get full information by writing to me.

Hubert Lemerise,
850 West 50th Place,
Chicago, Ill.

(We thank Mr. Lemerise for his kind words. We can say nothing but that we will continue to improve where we were bad, and to be better where we were good.—*Editor.*)

Not As H. G. Wells

Editor, WONDER STORIES:

There has been, in my opinion and the opinion of a few of my friends who read your publication, a rather marked falling off in the quality of the stories you have been offering in the last few issues of the first volume. This we attribute to the constant employment of the same authors who, working overtime as they probably are, have insufficient time to bring out new and radically different ideas. The result is an inevitable similarity between one story and another which makes reading a trifle wearisome.

At the same time, whilst every encouragement should be given to new authors, they seem to be inclined to follow in the footsteps of the others instead of striking out in other directions.

The second trouble which appears to exist is the vast amount of scientific theory, carefully elaborated, which fills the story almost from end to end. Cut it out! This is the reason my friends have lost their interest in your publications. May I suggest that for one month alone you make a selection of tales which have a minimum of science, beyond the bare necessity, and which include plenty of action. After all, the reader wishes for entertainment and too much "heavy" matter drives him away.

Wells is still one of the most brilliant exponents of the fantastic tale but he never includes any theories on science in his tales beyond, perhaps, a cleverly worded paragraph which leaves the reader satisfied—leaving the rest to the imagination. Perhaps it is not exactly fair to expect every writer to be an H. G. Wells, but there undoubtedly exist a number of authors, who write for your magazine, and who can produce like material.

Your QUARTERLY editions leave nothing further to be desired but I regret that the same thing cannot be said of the monthly issues. Cannot we have a few stories which deal with life *outside* the planetary system. The planets are, at the moment, overloaded but the number of pioneers who reach beyond the outermost planet are very few in number

However, that is by the way, and taken all around I am quite satisfied with WONDER STORIES. As this is only intended as a gentle hint as to how your publication is taken over here, please do not take my remarks in too serious a light. I wish you all success in the future, but you must buck up (please excuse the colloquialism). I will try to send along a story some day which, though you will probably reject it, will explain what I meant in the above remarks.

An Enthusiastic English Reader.

(As we have indicated many times, we are trying to strike what one of our readers calls "a golden mean" in our choice of stories. We have already insisted that the author do not cut into an exciting situation to elaborate on the Einstein theory, nor do he overload the story with uninteresting technical facts. We want to leave something to our readers' imagination. They have quite a bit of it and only want a chance to use it.

Our English correspondent, who wishes his name to remain unknown, will find in this issue, "Marooned in Andromeda," which just suits his taste for a story dealing with events beyond the solar system.—*Editor.*)

Missing Hamilton

Editor, WONDER STORIES

I have every issue of WONDER STORIES you have published since volume one, number one, and I have found it one of the best magazines in the field of science fiction on the newsstands. It would be *the* best if it wasn't for one thing, the fact that there has been only one reprint published since WONDER STORIES was put on the market, and that one was by H. G. Wells.

For gosh sakes give us at least one more reprint and make it "The Metal Emperor" or "Through the Dragon Glass" by A. Merritt or one of Ray Cummings' big stories like "Into the Fourth Dimension," "The Man on the Meteor," "Around the Universe" or "Tarrano

(*Continued on page 470*)

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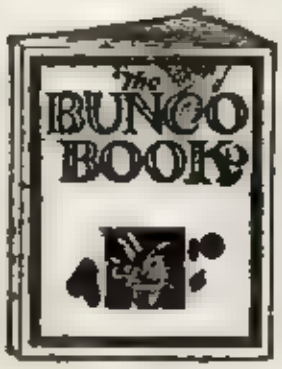

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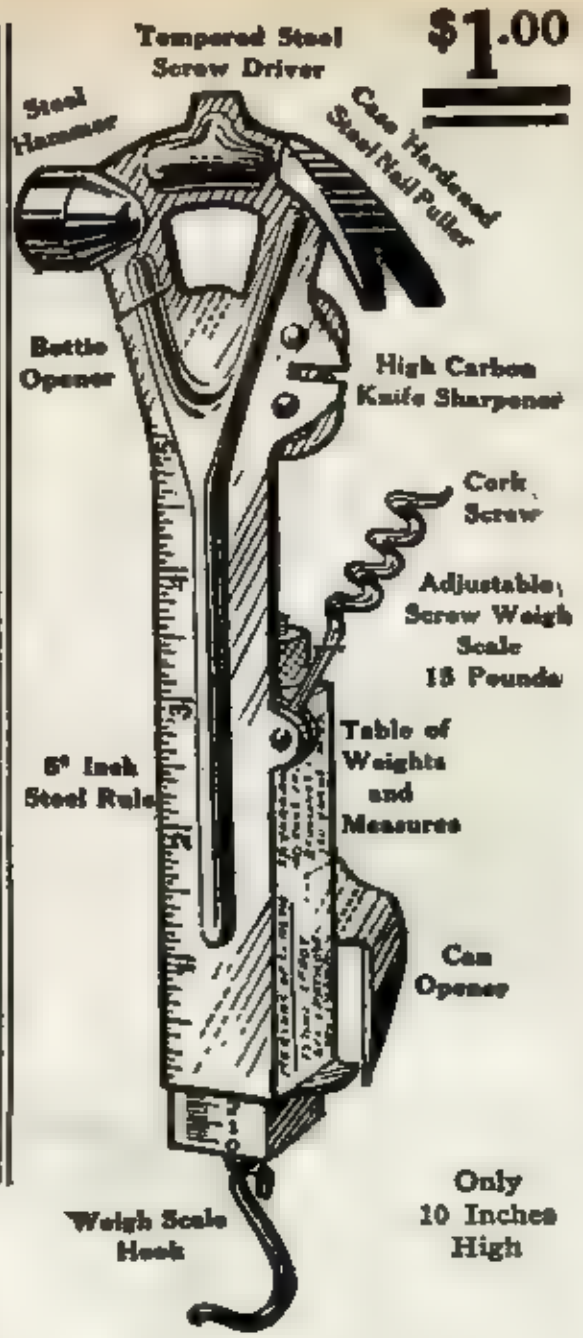

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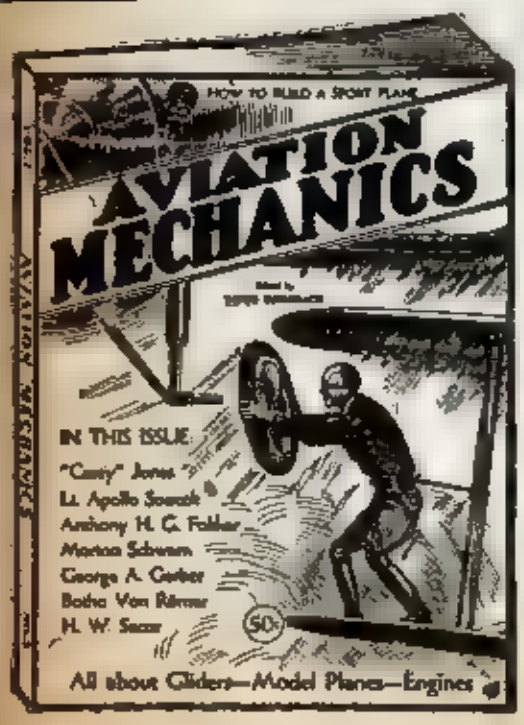

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THE READER SPEAKS

(*Continued from page 468*)

the Conqueror."

What happened to Edmond Hamilton? He's about the best writer of science fiction that has ever been produced. The last time I heard of him in this magazine was when I read "The Hidden World" in the first SCIENCE WONDER QUARTERLY.

Let's have a sequel to "A Subterranean Adventure." I've just about eat up the furniture worrying over what became of Teddy and Noema when they fell into the abyss. You remember Gotham said he had a feeling that they were all right.

I have one more thing to say before I close. Mr. Booth Cody is nothing but a big piece of cheese and sour limburger at that.

Kenneth L. Shine,
Apt. 401, Commerce Apt. Hotel,
Denver, Colo.

(We are afraid that Mr. Shine has missed a real treat. Edmond Hamilton has given us two of the most marvelous scientific detective stories ever written (if we are to believe the readers of AMAZING DETECTIVE TALES, our sister magazine. These stories were "The Invisible Master" published in the April issue and the "Murder in the Clinic" in the May issue. Mr. Hamilton writes us that he now has several stories in preparation for us and we can expect them quite soon. A sequel to "A Subterranean Adventure," we hear, is on the way. About reprints, we can, unfortunately, say nothing more as yet.—*Editor.*)

Time Will Tell

Editor, WONDER STORIES:

With regard to your new title, I absolutely agree with Mr. Lloyd E. Foltz's letter in your first number of WONDER STORIES. Why change your title at all?

Many have referred to this big streamer "Mystery — Adventure — Romance" which you have painted across the top of the page. The opinion of most in former times was that the title "Science Wonder Stories" was formidable to those who flattered themselves on their intellect. Now I find, after exhaustive and painstaking inquiries that this streamer makes the magazine appear more like Sloppy Slush such as those found in dentists' parlors and barber shops, which have no real intellectual value. However, the intrinsic merit of "Science Wonder Stories" makes one feel that the amalgamation was hardly wise.

Another brickbat: Your fraudulent promises about a bigger and better magazine. I have actually proved by careful calculations that our magazine has been reduced by four pages and also the small type which was used in the last couple of issues of "Science Wonder Stories" has been replaced again by the larger type of former issues. I think that is all as regards the publication of our valued monthly.

Now for the stories: I believe that some of our mentally impoverished authors are losing their ability to write actually original stories. The object of every one of them seems to be to write one story and leave it with the hero and heroine in such a state that a sequel is imperative. Now I ask you!

Enough of that unfavorable comment. Is it really true about Planet X? I hear that its mass and location and albedo have been settled but I am far from convinced of these reputed facts. I know you can clear up this thorny problem for me as you have done so for others.

I enjoy the splendid and untiring efforts of Mr. Gernsback so far as the editorials are concerned. They are so well-planned and deep-rooted in intellect that they make up for any possible defect in the rest of the magazine.

Hoping that you may return to your old style, but wishing you the best of success in any future venture, I remain,

A. G. MacDermott,
Savary Island, B. C.

(We don't understand what Mr. MacDermott means when he says, "our magazine has been reduced by four pages." The magazine still has ninety-six pages as always, and the number of actual text pages remains about the same as before, with even a tendency to run above the number of text pages in the old magazines.

We think that Mr. MacDermott has unintentionally or otherwise misconstrued the word "bigger." As we pointed out in our answer

(*Continued on page 471*)

THE READER SPEAKS

(*Continued from page 470*)

to the ill-fated letter of Booth Cody, the combination was of no financial advantage to us, we did not expect or hope to gain readers. We had found that our old readers wanted both the science and the aviation stories and that their best interests would be served, and ours ultimately too, by giving them both types of stories in one magazine.

We think that Mr. MacDermott will see it as unreasonable to expect an immediate jump in the number of pages in the magazine, since our income remains the same. What we have done is to gather together the best aviation and best science authors under one cover which in itself is a contribution to our readers. Naturally every publisher hopes to be able to ultimately increase the physical size of the magazine, but we think our correspondent can appreciate the injustice of asking for an immediate jump.

Our correspondent uses a strong word when he speaks of "fraudulent" promises. From the flood of letters that reached us after printing Booth Cody's massive, we are assured that our readers are fully behind us and that we have their complete confidence. Through the troublous economic conditions of the past year we have sailed along with security because of this reader confidence, and we hope to continue.

The difficulty in determining the real nature of Pluto (Planet X) is this. The planet is five billion miles away and we see it by its reflected light from the sun. If a star in the same general position in the skies were one hundred times as far away, were one hundred times as large and had ten thousand times the light-radiating properties it would appear to be as bright as Pluto and possibly as large. The real test of Pluto will come by observations of its orbit. And this can only be done over a number of years. This is a real case in which "time will tell."—*Editor.*)

No Harmony Possible

Editor, WONDER STORIES.

Concerning Mr. Hehr's letter in the August issue—seems to be he has his theories rather confused. Personally I know this chap, and although he has a lovely wife, and two adorable children, I can vouch for the fact that he's suffering from a superiority complex, which takes some mighty queer turns with him at times. His egotistical complex is revealed in his very remark that "90 per cent of the people are just plain tripe." That's a harsh statement, you know, but it wouldn't be so bad if he could only summon the diplomacy to include himself. At least, we could have some hope for his cure.

As for religion and Science "blending into one harmony" never! From the dim past to the present these two powers have been in constant, and sadly often bloody conflict, but in spite of it all Science has *conquered!* Candidly, I think religion, not as a sect, but as a whole has caused more bad than good. For this insane fanaticism, and I must also add, commercialism, millions have gasped out their lives at the stake. Did their god save them? *No!* Millions have been mangled into bloody nothingness in the torture vaults. Did their agony aid the cause? *No!* And the deplorable part of it is that a great many of the victims were mentally abnormal.

Mr. Hehr will be as mad as hops when he reads this, I'll bet, but when a chap goes in for this Occultism and Reincarnation ballyhoo, and takes it seriously, I mean *sincerely* he is mentally deficient. This form of insanity is dangerous as it causes self exaltation, and condemnation for the whole world, himself excepted. True, our magazine has published some occult stories recently, but Mr. Gernsback tolerates them only because they happen to be interesting and afford entertainment. A great many people read this sort of literature because it is "different," and best of all, gives one an extra laugh to brighten and lighten the toil and inconsistency of life. I write a lot of this fantastical ballyhoo myself, not because I believe in it, but because it "goes over."

Mr. Hehr's reference to the Sun being life's storage battery is in a certain sense correct, but he neglected to state that we ourselves, in fact all life, are composed of positive and negative electrical forces that create mental and physical harmony. (I refer to the normal being.) Abnormalities are caused from a certain

(*Continued on page 472*)

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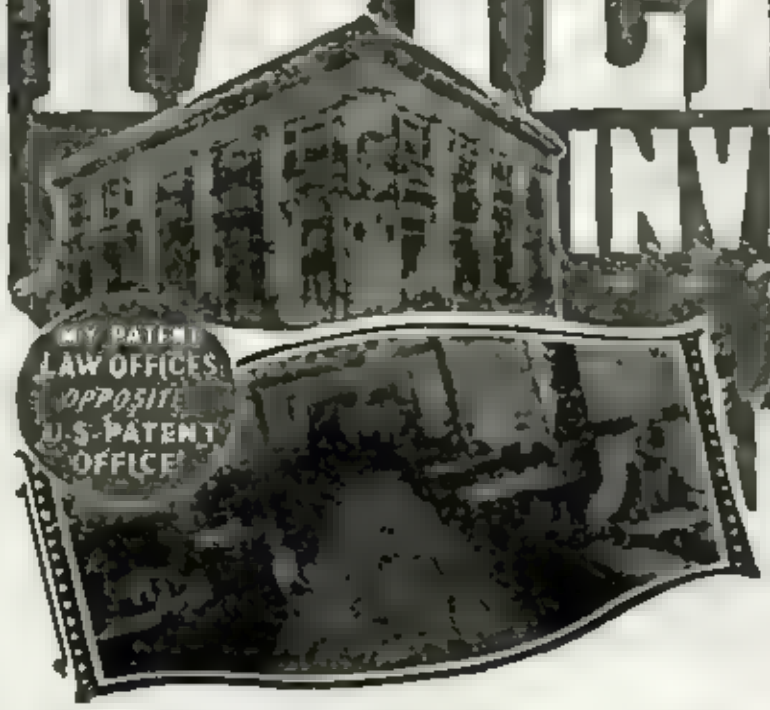

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The answer we cannot tell you without destroying the thrill you will receive as you read page after page of this masterpiece of Arthur B. Reeve. But rest assured, that Craig Kennedy is using the most amazing instruments of science to ferret out the mystery he is engaged in, and if it is humanly possible he will triumph.

OTHER STORIES IN THE OCTOBER ISSUE

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DEATH IN A DROP by Ralph Wilkins

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WRITE FOR CATALOGUE

THE READER SPEAKS

(Continued from page 471)

deficiency of the electrical chemicals in the blood stream, whose purity lies in the rather shaky care of the human. Passionate fathers please take notice. Nature creates perfection, but when man violates, she inflicts punishment that is swift, and carries on through the centuries. Yet, man's egotism and selfishness compel him to believe in a personal god. And this God is the *all*, the *perfect*, the *intelligence*, the *love*. And still, man has the colossal nerve to claim this God capable of constructing the human being, who is noted for his conceit, deceit, treachery, and a thousand other failings that we all know too well. Really, I could have done a better job of it myself. At least, I would have given the poor human a fair break. How about it, folks?

I consider the consolidation of the AIR and SCIENCE WONDER magazines an excellent move, as the resulting stories will be more compact and easier to manage. It really was a bother chasing two magazines, and half of the time we lost track of them. Isn't that so? And here's another. Why continually harp on the "cheap paper and loud cover." Personally I think both are all to the mustard. For instance, the papers of WONDER STORIES are pleasantly "soft" and absorbent, and naturally does not reflect light to obstruct perfect vision. True, some magazines print on "pretty" dazzling white paper, but if folks realized the damage this high class (??) paper did to their eyes, their blood would run cold.

Yes, I love WONDER STORIES, and find excellent enjoyment in the works of your literary staff. Even Dr. Keller's are good, in spite of that silk lined tomato can. By the way, I *have* seen worms six feet long, and *much* longer. To return to that worm. The Tape variety I refer to.

Just a few words more. I notice that some of the readers accuse you of "making money." My gracious! Who wouldn't? Besides, do these knockers realize that every cent you take in only gets back to them again through circulation? You run a great plant with a vast employ, and naturally, these employees pass the money on in that huge everlasting circle. Anyway, this money business is quite human.

Pearl Hamilton Elliott,
Hempstead, L. I., N. Y.

(Much of what Mrs. Elliott says is correct. Too often religion has been used as a means of repression, bloodshed, torture and the venting of malice and spite. But what has not been used for those ends? If man is fundamentally wicked, evil and malicious he will be so under any system, and with any code of beliefs.

But we insist that harmony between religion and science is not as impossible as she suggests. Religion is not altars and priests and sacraments but a faith in a meaning. Einstein goes to no church and follows no religious ritual but he has confessed to a belief in a *God*. His whole series of scientific theories has been nothing but an attempt to find a universal meaning to things. But instead of hiding himself in a cloister and fasting and rending his clothes, he studies the natural world of phenomena, makes mathematical calculations and arrives at formulae to tell him the meaning of the universe. He is trying to find a religion.

When the Darwinian theory began to break the back of the modern church and people understood its ideas they said, "Why not." They interpreted the Darwinian theory to mean that all life is blind struggle for survival, one animal, one species, one race constantly fighting for existence against other species and against nature itself. This idea passed into commercial life and business men saw all business as blind struggle. So they said if this is the law of nature why be ethical. Nature is cruel and relentless and all is fair in "love and war."

Nations too accepted this theory. Germany and France, England and Germany facing each other saw national life as blind struggle. Germany particularly was soaked in this idea. She saw herself ringed about by enemies who wanted to strangle the life from her and felt herself justified in fighting with feet, claws and teeth to keep alive.

Even Darwin himself foresaw the fatal consequences of the adoption of his ideas and tried to keep them from being applied to man. With humans life should not be all blind struggle of

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THE READER SPEAKS

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man against man and man against nature. Man has kindly traits such as gentleness, love, self sacrifice, generosity and the exercise of these traits can well constitute his religion as well as his civilization.—*Editor.*)

Cranks, Critics, Etc.

Editor, WONDER STORIES:

You probably get tired of hearing the statements, "I liked this," "I don't like that," "your magazine is a success," "congratulations," etc. That is not the purpose of my letter. My purpose is to bring out the shortcomings of the reading public, to make them see that they are not accepting the magazine in its broadest sense, and to show them their lack of appreciation.

When you receive the voice of the public and publish it through your columns one can see a great amount of narrow-mindedness in their opinions. There are exceptions to the rule but the majority of letters are either from cranks, critics, or interested readers with a selfish attitude. You no doubt know this to be true from your experience as publishers.

The public is always finding some little fault with this author or stating something they liked about that author, but as a whole they fail to give the author the credit that is due him. They don't seem to be conscious of the fact that if it were not for the authors the magazine would not be on the market for them to read today, and if they had to do it they could not do half as good.

Another point I wish to bring out is the credit due the editors and editorial staff. The public doesn't realize that the job as editor takes work and hard work, and that everyone can't be pleased. You had the right idea when you chose the policy, "Give the public what they want." Stick to it and you're bound to succeed. I, for one, appreciate the efforts of the editors and authors, who strive to furnish us monthly with interesting, educating, and imaginative literature.

Donald Hendrixson,
Cincinnati, Ohio.

(Our daily mail furnishes us with a good cross section of all classes, all types and all possible attitudes, not only toward us but toward the world as a whole. It is our job to sort from all this the material that we can use in our reader's column, the opinions that we want to remember in fixing our editorial policy and the mistakes that we must correct.

As Mr. Hendrixson says, this is a big job, and it needs every ounce of brain, and energy that we have. Too often we are inclined to relax and say, "Oh let's forget the public for awhile, let's play golf or go swimming." And then we get a letter such as this and we sit up and say, "There is justice after all," and we dig in with renewed vigor.—*Editor.*)

A Statement of Policy

Editor, WONDER STORIES

As there have been a great many inquiries from your readers regarding the Science Correspondence Club, I shall attempt to give a clear explanation of the aims of this organization.

The object of this organization is to promote science, and science fiction through correspondence, and by organizing branches throughout the country where members can get together, make experiments, hold discussions, and play active parts.

Each member has the privilege of choosing the one or more he wishes to correspond with, and through this means, ideas can be exchanged, formulas can be exchanged, and great results can be obtained.

A library is being rapidly built up for the use of all members, of books that pertain to science alone, and in addition there is the science fiction magazines which so much enjoyment is obtained in reading.

Branch organizations are encouraged and given all possible assistance.

The study of astronomy is greatly encouraged, especially Variable Star and Meteor Observing.

Among our members are some of the world's foremost authorities, who ever stand ready to assist us in our problems.

There are no paid officers in the organization, the dues of three dollars per year are used for publishing a bulletin, which is furnished free to all members.

Application blanks can be obtained either from the writer, or from the Secretary, Raymond A. Palmer, 1431-38th St., Milwaukee, Wisconsin.

F. B. Eason, Pres.,
Science Correspondence Club,
400 Jefferson Ave.,
East Point, Ga.

(We are very happy to have this statement of policy from the president of the Science Correspondence Club. We are glad that the club showed the wisdom to elect a man as mature, active and interested in the club's work as Mr. Eason. A great opportunity lies before the Club to do notable work in the popularizing of science in this country. We hope it will take full advantage of it and continue to grow and prosper as a result.—*Editor.*)

They Have Vindicated Themselves

Editor, WONDER STORIES

You know that in this funny game of life, intermingled in the webby art of living, we find many curious situations. One artist remains dominant. Whether you know him or not, I don't really know, lo' topper, but this ahem—er—bono is commonly referred to as "a sport."

This very creature reigns supreme in almost every living thing upon the face of this Earth. But of course, editor old dear, as in the case of nine times out of ten, there are exceptions. For instance, a few examples would be in a lowly, yellow cur; or a snarling, pink-hearted hyena or a wet dog who would write a letter and sign it, Booth Cody, Bronx, New York.

Now it so happens, pal o' mine, that this idea of "calling names" shall not meet with the approval of most "sports." But I'll say this much: You have it coming, and seeing that the conscience of my ego must be fed, I insist that you publish this letter so that my devoted friend, Mr. Cody, can derive maximum pleasure from the mess of insults that I'm going to water his carcass with.

Listen, oh foolish creature! Listen, oh inexperienced imbecile, why don't you at least show a few yards of your yellow livered guts by at least putting down your address so that the almost defenseless editors can at least have a sporting chance of fighting back?

I would feel cheap—very cheap to find myself undergoing this disgusting practice of attacking some one I have never seen—but the reeking letter that you challenged the editors to publish calls for much worse stuff. (Notice, dear old chap, that my full address is written below.) Imagine, O creature of the slime, what will powers the editors must have exercised in forcing themselves to show their *sportsmanship* and their true colors by even publishing that letter. That, alone, serves to almost convince the public that you're all wet.

Hm—listen, old tipsy boy, show your blood color. Write in a letter to the offices of WONDER STORIES and show your gut-length by apologizing. Mayhap I have hurt your pride? I'm willing to apologize for whatever I have said here and whatever I shall say—but you—you're not yellow—you're yaller! Come on, sonny boyee, you know you didn't mean it. You infernal ass, should your remarks have been true—which they aren't—couldn't you have the niceness about your corpse to keep it to yourself? Were you fearful lest some ardent devotee of science fiction would come to you and blacken your eyes with the fists of real sportsmanship—hence leaving out your address?

Naw! I'm too far away, saphead!

The editors have "vindicated themselves in the eyes of the readers." Show your colors, now. You struck at the editor because you knew very well that he couldn't strike back without losing his temper. I wish I could say what I will and still have this letter in print—for the public shall know what I think of such an un-sportsmanlike thing as you. If we do not read a letter of apology in this magazine within the next two months, then we will all know what the color of your liver is.

If we do, why then maybe after all, even in dogs like you, there lies a sense of the right. Write to me personally. I would like to discuss this situation in detail. I am pretty sure that I can convince you that you are wrong and

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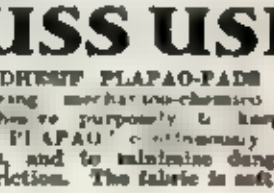

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THE READER SPEAKS

(*Continued from page 474*)

should never have written that missive.

Now to the editor: Old topper, it's my request that you publish this letter. Much as you wouldn't like to see some one take such drastic articulation in and to WONDER STORIES, I feel that some one must give vent to his anger at reading such a shameful specimen of what a science fiction reader resembles.

This argument is purely personal betwixt Mr. Cody and yours truly. We shall entertain no bad feelings at its close for after all, this letter only neutralizes his, consequently, all that we need to be friends is a "Pardon Me!" By his gibs. Why, if I find that he, after all, isn't the cur that he seems to be, by jingo, I'll even be his friend! Why I would even stoop to write to him.

In the event that someone reads this little heart-to-liver talk and is to any degree acquainted with his nibs, please notify him so that he may derive the full benefits and pains from my little rampage of the pen. I wonder what he looks like? Probably about six feet, tortoise rimmed glasses, lanky, a maze of protruding bones, a sickly yellow pallor upon his face—long, tubercular nails, discolored teeth and a dominant note of "mama's baby" all over him.

Hm—greatly resembling a lost species of sewer rat—. I can't hiss through this pen, but I wish he could hear me say it—sewer rat!

I hate like heck to call any one names—but I ask some of your ardent readers: Am I not justified in going to the troubles of striking back for some one who is practically defenseless?

We await the apology, o' illustrious, brave, brain of significance vast in size, Booth Cody, of Bronx, New York City. A friend of WONDER STORIES 'til Hell freezes,

John B. Carter,
336 Gaven Street,
San Francisco, California.

(We feel disinclined to publish this letter. We would rather have published Mr. Cody's and not this. But we feel that our loyal readers are entitled to an answer. We are quite sorry that the controversy should have gone this far, yet we are relieved to note that Mr. Carter is as sorry as we are that he must descend to using the means that he does here. The true test of the man of science is that he have a calm judgment, and do not form a judgment until he have all of the facts. If Mr. Cody had written us a private letter of complaint, setting forth the ideas he did, we would have cheerfully given him all the facts. He seemed to have none at his command. But instead he sent a violent and explosive letter, daring us to print it. We had no alternative but to do what we did.

In the mass of letters that reached us after the publication of Mr. Cody's *not one indicated or supported him.* This is the finest tribute of vindication that we could desire. We thank Mr. Carter, and now that we understand each other, the readers and the editors, we can go on our upward path as we did before Mr. Booth Cody's letter reached us.—*Editor.*)

A Choice of Roads

Editor, WONDER STORIES:

I have always been reading "The Reader Speaks" with a great amount of interest and now I finally have gotten up my points in presentable form. Please print this. I especially want you to do so for reasons shown later. It seems "our" magazine is in a stage of metamorphosis that is usually experienced by magazines on a new subject. You have two roads open to you in the adult stage. One is to be faithful to the original readers and have scientific fiction with a good deal of science intermixed with adventure and mystery, but with little or no romance. The other is to contaminate your stories with romance. If the love-fiends want romance they can find plenty of it in such magazines as Love Stories, but, for the love of science fiction, can't you keep it away from our magazine?

It strikes me that you think your troubles are due to not having enough love. I think they are due to too much love. What about all the letters of protest you have recently been receiving? There are only two ways to settle the point. One is to experiment as you seem to be doing now, but the results might be too disastrous if you happen to choose the wrong

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THE READER SPEAKS

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system. The other is to have a vote among the readers and that is what I suggest you do. Let the voters send in letters. They need only have "1" or "2" on them. "1" will stand for the former road, "2" for the latter. There might be "3" as the "golden mean." To begin with—"1"! Well, now that's off my mind! Here's to the abundance of "1"s! If the "2"s win—*Sic Transit Gloria Mundi.*

Dr. Keller is an exceptionally good author, but his errors could be improved upon and he also might leave out his romance.

Is there anyone who is interested in sciences like theoretical physics, interplanetary travel et cetera, that wants to communicate by mail to a like person? My address is below.

Milton Rosenthal,
3015 So. Norton Ave.,
Los Angeles, Calif.

(We are perfectly willing, as our correspondent suggests, to leave the decision up to our readers. We have already heard from quite a number of them and the results so far confirm us in our present course. We shall be very happy to receive such letters telling us whether our readers want courses 1, 2 or 3. We are at present pursuing what Mr. Rosenthal calls the "golden mean" and hope by means of that to fully satisfy as many as we can.—*Editor.*)

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A Dream of Vast Splendor

Editor, WONDER STORIES:

I am a licensed amateur radio operator and an extreme student of the sciences as my laboratory would reveal. My radio call letters are W6AVF.

From what I have read of the readers' letters, I perceive that their thoughts vary immensely. Some express a total hatred with smiting brickbats and unspeakable phrases that one can hardly grasp. However, the majority of the great mind write of the supremacy of our magazine.

Scientifiction is that which raises the mind to higher levels, causing one to desire constructing and to think out the progress of man's sciences. It places one in a wonderful dream of vast splendor—a vision of towering metropolis' that scintillate in dazzling magnificence. This marvelous fiction prevents men from lowering themselves to the level of snakes that crawl and strike behind one's back—the venom dripping from malicious fangs. And shows those who have improved, how to improve [illegible]

It gives us inspiration to do greater deeds—thoughts of love for our fellow men and women. It makes one wake up to the intense glories of the universe. Then why not? Why should we not gorge ourselves with this prophetic fiction?

I noticed particularly the fine letter which Miss McCable wrote. I wish to emphasize the fact that she dislikes the uncanny, inhuman affairs upon which certain authors base their fiction. She seems to dislike the intense science found in this fiction. Is it not scientific fiction? Certainly, science is the most stupendous of all things in the universe. Of course every story must have something for the leading characters to overcome. Therefore, the more malignant and unapproachable that something is, and the more breath-taking and strange the adventure, the more the fiction satisfies me. To put the cover on the pot, the fiction must be literally writhing with the most fantastic imagination and science. Now I do not mean fairy tales when I say fantastic, because these imaginations must be based on scientific fact.

A story of all stories was "A Subterranean Adventure" by George Paul Bauer. The way he explained the excruciation of that madman in the madhouse of Ras, the infernal machine causing the eyes to protrude until they might explode, the adventures of Ned Gothram and his nephew Teddy were, from beginning to end, the most blood-chilling and gruesome tale I ever read. It was packed full of super science and education. I ask that Mr. Bauer write a sequel to this masterpiece. There is much food for an even more thrilling story.

The interest of a story depends greatly on the illustration. The illustrations of the Wonder Stories' type of fiction claim accuracy and grandeur. There is only one artist that can supply this importance, and that artist is Paul. I am sure that every reader, and you too, will agree with me there. The illustration on the cover of our August issue of Wonder Stories is one of the most spectacular pieces of work I have ever seen. This illustration of the "Radium Master" by Jim Vanny actually "illustrates." It gives us the entire story in very few lines. The elemental colors, being only four, give it a vivid contrast upon the sight. Consequently, more people will like the magazine and help the editors to give scientific fiction to the world.

There is all of Mystery—Adventure—Romance in Wonder Stories, but there is a great deal more. There is Science. It is truly a magazine of prophetic fiction. It prognosticates the future.

John Batchelor,
2009 E. 21st Street,
Oakland, Cal.

(We are glad to find that Mr. Batchelor is one of those who has the capacity to appreciate what an author or artist puts into a story. As one reader said when replying to a critic, "Try and do one yourself." The ability to picture in advance of their happening, the changing of our world by means of science, is to the editors the most marvelous quality a man's mind can have. Certainly by reading hundreds of manuscripts every month—good, bad, indifferent and some with a spark of genius, we are able to detect the powerful strain on the author's mind. He must close his eyes tightly, and divorce his memory from the world about him. He must by an intense effort of will literally throw himself on the precipice of present realities into the new world that he is trying to imagine. He must sweat and labor to get that picture complete so that it will ring true. It is creation of the most intense kind. Therefore if in the midst of his marvelous imaginings an author does occasionally "fall down," we must be generous, and realize that what he gives us more than compensates for the trifling error or misjudgment. As editors who know just what our authors must go through to give our readers the marvelous stories of "prophetic fiction," our hats are off to them.—*Editor.*)

(Continued on page 476)

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THE READER SPEAKS

(*Continued from page 475*)

Glad the Stars Were Shining

Editor, WONDER STORIES.

Just a line to let you know WONDER STORIES is getting better and better. "The King of the Black Bowl" is certainly reasonable and convincingly prophetic. I am a great admirer of R. F. Starzl and am glad to see his stories running. Living here in Chicago, the story meant much to me.

I read it at night and after finishing it I went outside and was relieved to see that the stars were shining overhead. Please print lots of stories in which something really "happens." Stories with nothing but a bunch of imaginary science become terribly boring after you read a thousand of them. Run more action stories.

Byron Krassell,
Chicago Ave. Police Station,
Chicago, Ill.

(Mr. Krassell's feelings after reading Starzl's marvelous story were just about those of the editors. The story really gripped one tremendously, for it had the life-likeness that distinguishes the good from the bad story. One couldn't help but feel that the events pictured were actually happening. We have two more of Mr. Starzl's stories on hand, dealing with interplanetary adventures, and they will be used in the very near future.—*Editor.*)

Adventure Should Be Emphasized

Editor, WONDER STORIES:

There seems to be quite a controversy as to the part that romance should play in science fiction. I do not object to romance if there isn't too much of it, or if it doesn't get too slushy.

However, in my opinion, *adventure* should be emphasized more than anything else. Men read your magazines for entertainment, and the more adventure there is in stories, the more entertaining the stories are likely to be.

You invite us to send in our lists of the most popular stories. The following were, in my estimation, the five best novels and serials to appear in the first year of WONDER STORIES, including the QUARTERLY:

1. "The Human Termites"
2. "The Conquerors"
3. "A Rescue from Jupiter"
4. "The Shot Into Infinity"
5. "The Hidden World"

The five best short stories were:

1. "The City of the Living Dead"
2. "An Adventure Into Time"
3. "The Onslaught from Venus"
4. "Warriors of Space"
5. "The Boneless Horror"

Now for the worst five:

1. "The Radium Pool"
2. "The Marble Virgin"
3. "The Metal World"
4. "Professor Diel's Ray"
5. "The Insatiable Entity"

My favorite authors are Hamilton, Keller and Gernsback. I should like to see more stories by the latter, even if you have to use reprints.

Speaking about reprints, why don't you give us some? With the exception of "The Diamond Maker," we haven't had a single reprint. It's true that two appeared in ARE WONDER STORIES, and very popular they proved to be. Also many requests from the readers are coming in for reprints. Therefore, I'm sure that some good reprints would be quite popular.

When you first announced the "Science Fiction Classics," you said that one would appear each month. I haven't seen the second one yet How about it? Here's one case in which you didn't keep your promise.

By the way, in the September issue you haven't told us the number of parts in "The War Lord of Venus." This is the first time you have forgotten(?) to give us this information about a serial. Let's hope that this doesn't happen again.

Michael Fogaris,
157 Fourth Street,
Passaic, N. J.

(We must plead guilty to having delayed the publication of further science fiction classics. The delay was occasioned by difficulties in getting the stories that we thought were fitted to go into the series. We have had the opportunity to use many inferior stories, but we must insist on printing only those which we can truthfully call classics. We ask our readers to be patient and believe that the delay will vanish in the near future.

Adventure is something that every red-blooded

(*Continued on page 477*)

« « BETWEEN EARTH and MOON

By Otfrid von Hanstein

High in space a solitary person was floating — separated from everything

MOST writers of moon stories have seen as the most interesting part of an interplanetary adventure, the conflict of our race with a new and strange civilization. They assume that the Moon, Venus, Mars or some other planet is inhabited and proceed to construct excellent stories about the probable adventures our earthlings would have.

The present story however is a complete exception. Von Hanstein does not at all deviate from what we actually know about the moon—that it is by turns intensely cold and intensely hot—that it has two weeks of night and two weeks of day; that it is lifeless, airless and indeed a most desolate dead world. What would happen then, he asks, if some space voyagers found themselves stranded on this dead world? How could they live; and if they did live what would be the effect on their health and their nerves of the terrible desolation, the unending monotony of the lunar world? Would they go mad and try to kill each other? Would they revert to savagery?

These are questions that must be answered if space travel is to really come, and our author does assure them. We must face the facts, the difficulties, as our good author gives them to us gloomy as they are. But there is a brighter side to his picture too. There is humor as well as tragedy, bravery and the thrill of dashes across hundreds of thousands of miles of empty space in this most exciting and real of interplanetary stories.

IN THE FALL ISSUE

BETWEEN EARTH AND MOON
By Otfrid von Hanstein
(Translated by Francis Currier)

AN ATOMIC ADVENTURE
By William Lemkin, Ph.D.

THE ISLAND OF TERROR
By Ransome Sutton

THE STRUGGLE FOR NEPTUNE
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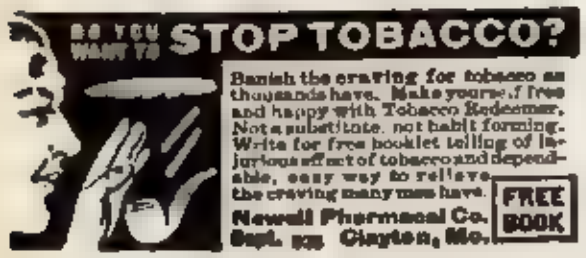

THE READER SPEAKS

(*Continued from page 476*)

man and every normal woman responds to. It is true, as one reader pointed out, that adventures among strange peoples and strange worlds is in itself romance, whether there is a love element or not. Who would not like to be able to fly to Mars or Venus, or to travel five hundred years into time and see what the world of the future will be like, or to be able to converse telepathically with some one a thousand miles away? These are all romantic adventures which will sooner or later be stern realities, and meanwhile our authors permit our readers to experience these things in advance by means of their marvelous stories.—*Editor.*)

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And other stories and features in this unusual issue

When Slush Is At a Minimum

Editor, WONDER STORIES:

Miss McCabe may not believe it, but if the "way one got there" were left out of the story it would not be science fiction. It would only be ordinary fiction. Romance and adventure, as well as both women and men are where you find them. And that's just where they belong. I can see them where many cannot and many see them where I don't see any thing. She is right when she says that certain features have become monotonous—but in other "brands" of popular fiction there is an even greater uniformity. At least no set form has become traditional in this field yet. The recluse-mummy she spoke of is becoming ever rarer, in fiction as well as fact.

Romance does not necessarily mean love scenes. There is usually more chance for true romance when slush is at a minimum. Besides, if that's what she wants there are many magazines to choose from. So far as I'm concerned, the heroes needn't be super-, but merely "ultra-".

Anyone who thinks machines are the cause of unemployment might read, for instance, some of the writings of Dean Swift. Read his suggestion of a means of disposing of the children of the many poor. The Gangs of today are but a development of the bands of unemployed mercenaries who used to roam about between wars in past days. Between the Napoleonic Wars and the World War was a time of unprecedented peace and mechanical development, with unemployment at a minimum. The War called for an extra number of workers and at the same time drew many workers from their jobs. Many men were killed but at the same time an exceptionally large number of children were born. And then:

1. Increasing numbers of soldiers were released from service.

(*Continued on page 478*)

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THE READER SPEAKS

(Continued from page 477)

2. Demand for workers decreased.
3. The exceptional crops of children are just beginning to go to work and in succeeding years more and more will do so.

No, I don't think unemployment and bawdiry are out of proportion to the population—yet, but many states and countries are pursuing policies which encourage breeding of the unfit.

Clifton Amsbury,
2216 Ward St.,
Berkeley, Cal.

(We do not know whether Miss McCable is asking for more romance wanted more "slush." We have never asked for it from our authors, in fact our editorial rules to them are, "Do not have a love element in your story unless it belongs there. Do not drag love in by the hair." That is the policy we will continue to follow. For if a love or romantic element *belongs* in a story by virtue of the plot and action, it will seem so natural that it will not stand out like the proverbial sore thumb. We believe we have followed this policy consistently.

The difficulties of unemployment which dog us at present are due, according to authorities, to a surplus of labor. In other words our labor saving machinery has been so completely developed that we can produce more than we can consume and so plants find that there is not enough demand for all the product of all their machines and must lay off part of their forces. This is merely a temporary maladjustment of our economic machine, but these maladjustments will continue to occur until there is national and international coordination between the demand for goods and the supply of them.—*Editor.*)

BOOK REVIEWS

MYTHS OF THE ORIGIN OF FIRE, by Sir James George Frazer. 240 pages, stiff cloth covers, size 5¼ by 8½. Published by The Macmillan Company, New York. Price, $4.50.

As our author says, of all the inventions of primitive man, that aided him in beginning the long climb from savagery to civilization, the discovery of fire was perhaps the most important. For with this new weapon, man could now keep off the wild beasts, keep himself warm in winter, cook otherwise inedible foods, melt metals and do other innumerable things that mark the man from the beast.

Sir James who is an eminent student of early civilizations is of the opinion that only through a study of the mythology of our most primitive civilizations can we find how the combination of circumstances arrived in which man found that nature offered them this new and valuable friend. From his experience with our present primitives, Sir James has found that none are without the use of fire and none have any direct racial memory of the time when they were without fire. But all the races low in the scale of civilization have stories handed down from father to son about how fire first came to them. Such races that Sir James has made the object of his study are the Tasmanians, the Australian aborigines, the Polynesians, among others. But he has extended his inquiry over the whole globe and his work includes the myths about the discovery of fire extant on each continent and in almost every race.

This book, by an acknowledged authority, should prove quite stimulating to those interested in this most fascinating side of the dark age of man's history.

THE SEVEN SKIES, by Harry F. Guggenheim. 209 pages, illustrated, stiff cloth covers, size 5½ by 8¼. Published by G. P. Putnam's Sons, New York. Price $2.50.

If there is any man in America competent to speak on aviation—its past, present and future—it is Mr. Guggenheim. As president of the Daniel Guggenheim Fund for the Promotion of Aeronautics he was one of the great forces assisting toward the completion of man's conquest of the air. As a Lieutenant Commander of the Naval Air Forces during the Great War, he received his practical introduction to aircraft and learned at first hand some of its possibilities and weaknesses.

Mr. Guggenheim introduces his subject—What is the future of aviation?—by recounting its past, from the days of Greek mythology to the time of the Lindbergh flight. He shows, with glowing praise for the intrepid Colonel, the difficulties Lindbergh faced in daring the Atlantic with the equipment he had at hand; and how the flight converted a nation fearful and hesitant about aviation into a nation of enthusiasts.

But of the difficulties that faced Lindbergh, many were due to the inadequacies of his plane. A great number of these faults have been since corrected, and others are in the process of correction; so that Mr. Guggenheim is assured in stating that trans-atlantic airplane service is not far off.

Going on to discuss the future of aviation, the author speaks with the word of authority and the carefully weighed statements of one who refuses to be blinded by mere enthusiasm. He recognizes the difficulties that face aviation, particularly in the matter of getting safer and safer planes, which can only be obtained by the expenditure of large sums for research. But our conquest of the "Seven Skies" as he calls it, is inevitable, and will complete the work being done by other agencies of transportation and communication in destroying national boundaries and national prejudices.

WHAT'S LIFE ALL ABOUT? by Bertha Condé. 270 pages, stiff cloth covers, size 5½ by 7¼. Published by Charles Scribner's Sons, New York. Price, $2.00.

This book is not scientific, that is it deals with a subject no more scientific than what life means to the individual man. Miss Condé who is a popular lecturer on rational religion outlines here her position on the question of religion and science. She digs out an innumerable number of quotations from scientists as well as clericals to prove that religion is a vital force in life.

The book suffers chiefly from the exhausting quotations which follow each other in monotonous succession, so that we are unable to get a unified comprehensive picture.

A rational religion which admits of the acceptance of the facts of science is quite possible, Miss Condé concludes, and such a religion according to her is the thing that transforms an empty life into one full of meaning. Her defense of the possibility of immortality, however, is taken chiefly from scriptures and here she makes no pretense to any scientific basis for her belief.

The book is interesting as showing a point of view midway between the die-hard theologians and the die-hard scientists.

MOTHER WIT, by Estelle H. Ries. 300 pages, stiff cloth covers, size 5 by 8. Published by The Century Co., New York. Price, $2.50.

Mother Wit is one of the best books of its kind in American folk-lore, and its author, Estelle H. Ries, has devoted many years to personal investigation and research. Miss Ries, well known to readers of *Good Housekeeping*, *Forum*, *Arts and Decoration* and other national magazines, uses some material which has appeared before, and to which she makes valuable additions in her charming volume.

The writer has delved into most of the obscure places of the world in search of authentic historical information, and she has performed a remarkable feat in organizing and vivifying and making romantic the amazing lore she has brought back from the far corners of the earth. Miss Ries treats of every phase of modern life, from bathing and dressing to money-making and home-building, from time-telling to lighting, eating, sleeping, marriage, household furniture, transportation, building, and perhaps more important than the others, the development of the art of written and spoken language in the various important centers of the ancient and modern world.

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A few of the interesting pages from EVERYDAY MECHANICS

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Space does not permit us to print the 55 features in the current issue of EVERYDAY MECHANICS. But the following titles will give you some indication of the interesting and valuable contents:

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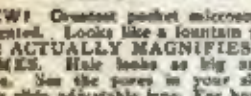
Wonderscopes



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No. 6651 Wonderscope B—Same as above but adjustable to the amount of light available. Prepaid **$1.35**

Luminous Paint

Make your own luminous articles. Paint watch and clock hands, electric light switches, push buttons, keyholes, house numbers, etc. 1,000 uses. Articles treated stand out brilliantly in dark. The darker the room, the more brilliancy.

No. 6508 Luminous Paint. Prepaid **25c**

No. 6508-A Large Size ... **$1.00**

Nose Blower

The real article! Conceal nose blower in your handkerchief and blow into instrument while you pretend to blow your nose. Everyone stops and looks at you. There never was a terrible noise like it. Keep it up as long as you like.

No. 6510 Nose-blower. Prepaid. **10c**

Bluffgun

Bluff your friends with this gun. Made of composition metal handsomely nickeled. Exactly same size, weight and shape as real article. Fine to bluff burglars. Used also as desk paper weight. Size of this gun is 6¼" long and 3" wide.

No. 6501 Bluffgun. Prepaid. **65c**

Imp in the Bottle

A real Cartesian diver—Can you explain how it works? A little glass imp placed in a bottle of plain water and sealed with special rubber cap, dances up and down in the liquid at your will. Will perform unique antics. An interesting, amusing and artistic novelty. Bottle 4 inches high.

No. 6175. Imp in Bottle. Prepaid **35c**

Microscopes

A REAL laboratory microscope that stands 5" high, comes complete with forceps, 2 prepared specimen slides and 2 blank glass slides, all packed in a cherry wood box with brass hinges and fittings. Made entirely of lacquered brass, with powerful lenses. Entirely demountable to facilitate cleaning. Has arcade (open both sides) frame and rotary reflecting mirror. Made in three models for use in home, office, or laboratory.

No. 6643. Microscope. Magnifies 30 diameters. Prepaid **$3.75**

No. 6646. Microscope. Magnifies 70 diameters. Prepaid **$5.50**

No. 6647. Microscope. Magnifies 90 diameters. Prepaid **$6.75**

Big Magic Set

A chest of magical apparatus and directions for performing TWELVE AMAZING MAGICAL FEATS. An entire evening's entertainment can be given with them. Includes the Magic Vanisher, Cigarette Vanisher, New Coins, Master Memory, Beads on String, Obedient Ball, Vanishing Watch, and many others. Biggest value ever offered, worth double the price we ask.

No. 6718. Big Magic Set. Ppd. **$1.00**

Real Pistol

Here's a real pistol, yet small enough to be used as a watch charm. Illustration is full size. Imported, best European workmanship. Excellent reproduction of standard pistol. Cut shows pistol broken open to load blank cartridge. When trigger is pulled, cartridge goes off with a loud BANG, that can be heard for a block. Pistol entirely made of steel, nickel plated. Handle is beautifully engraved. Octagonal barrel. Comes in box, with cleaning rod and 25 blank cartridges AT NO EXTRA CHARGE. (As explosives are prohibited to go by mail, pistol is sent express collect).

No. 6509 Pistol **$1.20**

No. 6509A Box of 25 Cartridges, by express collect **25c**

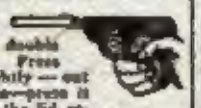
Opera Glass Charms

A pretty and unique watch charm. ¾"x1". Exact duplicate of real Opera Glasses. Powerful lenses that clearly magnify the view. Assorted views, scenic and French actresses. Fitted with ring to attach to watch chain. 2 VIEWS to each charm.

No. 6509. Bone Opera Glass Charm, Prepaid **25c**

No. 6506. Rolled Gold Opera Glass Charm. Prepaid **75c**

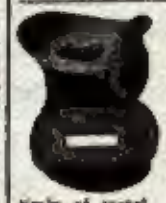
Cigaret Gun



NEW. Actually shoots cigarettes. New improved double action model. Press the trigger lightly—out shoots a cigarette—press it again, back flies the lid revealing it a cigarette case. Looks like a real automatic. Made entirely of metal, with nickeled stock, barrel and fittings. The same size as the real article, and weighs but 12 ounces.

No. 6516. Automatic Cigarette Gun. Prepaid **$1.79**

Homeastone



Anyone can play the Homeastone. A unique and novel musical instrument played with nose and mouth combined. Produces sweet toned music similar to a flute. No fingering—no lessons. A little practice and you'll get the tunes. Made entirely of metal. Nothing to get out of order or wear out.

No. 6537. Homeastone. Prepaid. **10c**

Magic Sets

Here is the best selection of three magic sets at bargain prices. The contents of any of these three sets are valued at 60c. Requires no skill to perform, are entirely automatic and simple in operation. Each box contains five or more magic articles and complete instructions for performing the various feats.

No. 6701. Coin Tricks. Prepaid.
No. 6706. Magic Set. Prepaid.
No. 6707. Card Tricks. Prepaid.
Or all three numbers. Prepaid **25c** **65c**

Telescopes

We carry only high grade imported French telescopes. All come in gold brass lacquer. The most powerful telescope made. No. 6650 is covered with black Morocco leather. Brings object nearer ten times. This number has also brass dust cap and automatic eyeslide piece. Comes in imitation leather carrying case.

No. 6504. Telescope. One draw. 8¼". Prepaid **98c**

No. 6648. Telescope. Two draw. 9¼". Prepaid **$2.00**

No. 6649. Telescope. Three draw. 13¼". Prepaid **$3.50**

No. 6650. Special Telescope, 4 sections. 13½" long. Prepaid **$4.95**

Blackstone's Magic

A big 98-page book, every trick illustrated. Instructions for over 50 MAGICAL TRICKS—25 MATCH TRICKS—7 OPTICAL ILLUSIONS and MANY OTHER interesting diversions. No skill needed—no practice—no special apparatus. Written by the famous magician, Harry Blackstone. Neatly bound with highly lithographed cover. Most astonishing value ever offered.

No. 6601. Book of Magic, Prepaid **25c**

NEW!! Telegraph 25c

For the astonishing small sum of 25c you can learn telegraphy. Any wide awake boy or girl can learn the telegraph codes with this little outfit within from 30 to 60 days. Gives loud signals perfectly—nothing to wear out. No batteries. The instrument consists of hard fiber base, mechanical sounder and telegraph key knob. Screw it to table or carry it in pocket. Guaranteed to give exact reproduction of telegraph sounds just like regulation sets. We also furnish free a set of telegraph codes as shown, and full instructions of how to learn telegraphy.

No. 6525. Telegraph Set. Prepaid **25c**

Luminous Skeleton

A real startler. A big colored figure of a skeleton, 12 inches high, that emits a ghastly radiance in the dark. Not a pretty sight but a big thrill producer. Gives you the creeps when you know about it—but a real surprise for those who creep upon it unawares.

No. 6613. Luminous Skeleton. Prepaid **15c**

3 for 40c

Wizardeck

A full deck of 52 linen finish cards that you can use for play or magic. Deck is cut tapered, one end narrower than the other. Draw away card picked from the deck—and hundred of other amazing feats. Full instructions for performing 15 different tricks. Startle and entertain your friends. No skill required.

No. 6709. Wizardeck. Prepaid .. **75c**

NEW!! Spintharlscope

Positively the most astounding scientific instrument ever developed. This instrument formerly sold from $1.00 to $50.00 upwards. Now it is possible to get it for a small sum. Witness actual destruction of thousands of Worlds by simply looking through the lens of the instrument. Actual radium is disintegrated before your eyes. You see the atomic bombardment plainly. Instrument is guaranteed to contain a minute quantity of radium. There is no more enthralling sight in the whole world. Nothing to wear out. Lasts forever.

No. 6534—Spintharlscope complete with instructions. Prepaid **65c**

Invisible Ink

A fluid in which you can write love letters, confidential messages, etc., without fear of detection. Remains entirely invisible until paper is heated. Used extensively by secret service operatives, detectives, etc.

No. 6520. Invisible Ink.—Per bottle, prepaid (3 for 40c) **15c**

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No. 6800. Combination Cigar Holder. Prepaid **75c**

Cigarettebangs

Here boys is THE novelty. Box contains a dozen tiny wood pegs—but they are "treated." Push the sharp end of peg into cigarettes about 1/3 in. Pegs are so small they're invisible. Then offer your friends the cigarettes. BANG, BANG! they go off—Yet ENTIRELY HARMLESS.

No. 6530. Cigarettebangs Prepaid **15c**

Midget Harmonica

The smallest harmonica made, only 1¾" long. It is a practical musical instrument and a popular novelty. Has four single holes, eight perfectly tuned reeds, brass plates, nickel finish covers and ring to attach to your watch chain or fob.

No. 6531. Midget Harmonica. Prepaid. **15c**

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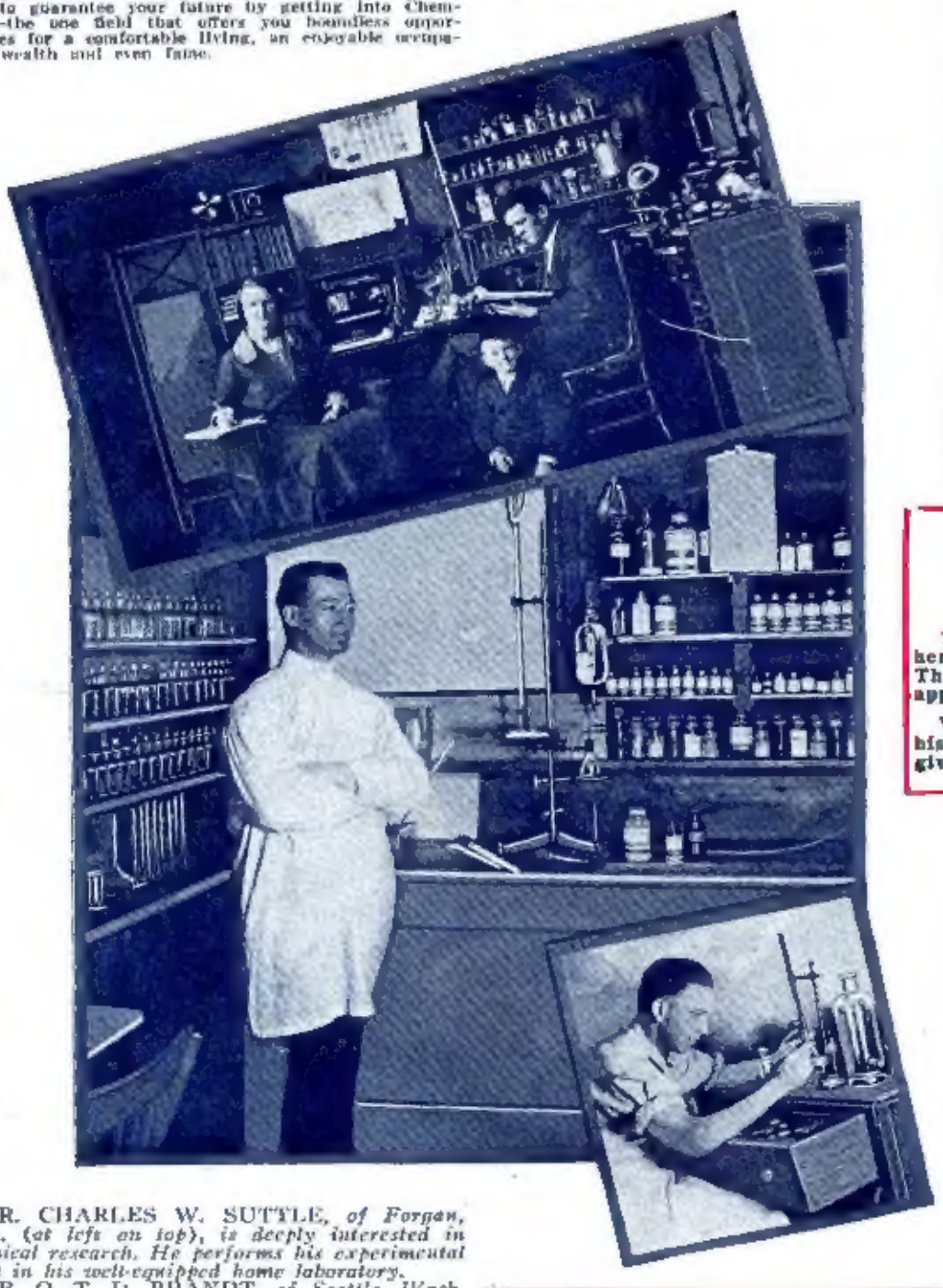

MR. CHARLES W. SUTTLE, *of Forgan, Okla. (at left on top), is deeply interested in chemical research. He performs his experimental work in his well-equipped home laboratory.*

MR. O. T. D. BRANDT, *of Seattle, Wash. (center photograph), is an analytical chemist of demonstrated ability. In his home he has equipped a laboratory containing several thousand dollars' worth of equipment, bought entirely with earnings from spare-time work while he was taking our course.*

MR. VIRGIL REDGATE, *of Hutchinson, Kans. (bottom right-hand photo), began doing professional analysis on commission, even before he completed his course. He is also the inventor of several devices and processes used in photography.*

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